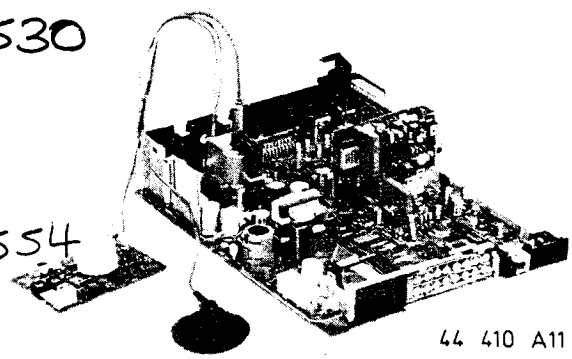
Colour television CHASSIS G90/AE B

Service
Service
Service

15GR 2330/2530
17 GR 2540
15GR 2331
21 GR 2550/2554
21 GR 2752
17 GR 2341
21 GR 2350/05B
21 GR 9752

52KV2523
52KV2525



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21GR2651

Service Manual

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Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço

Subject to modification
GB 4822 727 16447
Printed in The Netherlands

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Published by
Service Consumer Electronics
CS 19 818 GB

TECHNICAL DATA

Mains voltage	: 220–240 V ± 10 %
	: 50 Hz ± 5 %
Aerial input impedance	: 75 Ω – coax
Minimum aerial input VHF	: 30µV
Minimum aerial input UHF	: 40µV
Maximum aerial input	: 180mV
Pull–in range colour sync	: ±300Hz
Pull–in range horizontal sync	: ±600Hz
Pull–in range vertical sync	: ±5Hz
Picture tube range	: 11" A26JGZ31X03
	: 14" A34EAC01X70
	: 15" A36EAM01X16
	: 17" A41EAM01x16
	: 21" A51EAM31X16 or
	: A51JAR30X01MZ

Local operating functions:

⏻, P±, ◢ ±, ▭ ±, ◐±, ◇/ ◇, ⏭

Extra local operating functions for sets without remote control:

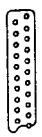
⏻, ☼ ±, 🌐±, ▭, ▭+

Indications
– On Screen Display (OSD)
– LED (⏻, ⏻, RC5)

VCR programs: 0–59
Tuning and operating system: VST3

Connection possibilities:

Rear side of the set



1 – Audio ⊖→ R 0,5Veff/≤1kΩ
2 – Audio →⊖ R 0,2 – 2Veff/≥10kΩ
3 – Audio ⊖→ L 0,5Veff/≤1kΩ
4 – Audio ⊥
5 – Bleu ⊥
6 – Audio →⊖ L 0,2 – 2Veff/≥10kΩ
7 – Bleu →⊖ 0,7V_{pp}/75Ω
8 – RC5 data 500 – 800mV_{pp} + Status CVBS 0 – 2V (L) 10 – 12V (H)
9 – Green ⊥
11– Green →⊖ 0,7V_{pp}/75Ω
13– Red ⊥
15– Red →⊖ 0,7V_{pp}/75Ω
16– Status RGB 0 – 0,4V/75Ω (L) 1 – 3V/75Ω (H)
17– CVBS ⊖→ ⊥
18– CVBS →⊖ ⊥
19– CVBS ⊖→ 1V_{pp}/75Ω
20– CVBS →⊖ 1V_{pp}/75Ω
21– Earth screen

⊙ AUDIO ◢ 0,2 – 2V
CINCH

Front side of the set

◎ CVBS →⊖ 1 V_{pp}/ 75Ω
CINCH

◎ Audio →⊖ 0,2 – 2 Veff/≥10k
CINCH

◎ 6.3mm 🎧 8 – 1000Ω

WARNINGS

1. A set to be repaired should always be connected to the mains via a suitable isolating transformer.

2. Safety regulations demand that the set be restored to its original condition and that components identical with the original types be used.
   Safety components are marked by the symbol ⚠

3. To prevent damage to ICs and transistors any flash-over of the EHT should be avoided.
   To prevent damage to the picture tube the method, indicated in Fig. 1, has to be applied to discharge the picture tube. Make use of an EHT probe and a universal meter (position DC-V). Discharge until the reading of the meter is 0V (after approx. 30s).

4. **ESD**
   All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair may reduce life drastically.
   When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
   Keep components and tools on the same potential.

5. Together with the deflection unit and the possible multipole unit the flat square picture tubes applied form one whole. The deflection and multipole units have been adjusted optimally in the factory. Adjustment of these units during repair is thus not recommended.

6. The EHT cable has been bonded in the line output transformer. It can thus not be replaced.

7. Proceed with care when testing the EHT section and the picture tube.

8. Never replace any modules or any other parts while the set is switched on.

9. Wear safety goggles during replacement of the picture tube.

10. Use plastic instead of metal alignment tools.
    This in order to preclude short-circuit or to prevent a specific circuit from being rendered unstable.

REMARKS

1. The direct voltages and waveforms should be measured relative to the nearest earthing point on the printed circuit board.

2. The direct voltages should be measured as follows: Do not apply an aerial signal. Adjust the receiver for minimum brightness, maximum saturation and contrast.

3. The oscillograms should be measured under the following conditions:
   a. Use a colour bar pattern of pattern generator PM5515 as input signal.
   b. Adjust the voltage of the saturation control at pin 6 of IC7350 to 3V DC.
   c. Connect an oscilloscope (1V/cm-10µsec/cm) to pin 16 of IC7350. Set the brightness control so that the level of the black bar in the video signal is lying at 2.7V (see Fig. 2). Set the contrast control for a video signal amplitude of 2.4V (see Fig. 2).

4. If necessary, the oscillograms and DC voltages are measured with
   (⊓⊓) and without (⊓̸) aerial signal. Voltages in the power supply section have been measured for both normal operation (⏻) and in the stand-by mode (⏻) These values have been indicated by means of the corresponding symbols.

5. The components, mentioned in the parts lists, are per position completely interchangeable with the components in the set, irrespective of the possible type indications.

6. The picture tube board is provided with printed spark gaps.
   Each spark gap is arranged between an electrode of the picture tube and the aquadag coating.

7. Connectors used for the modules (board to board) have been gold-plated and must be replaced by the same type only.

8. The accessibility of the circuits on the SECAM/PAL transcoder can be increased through application of extension printed circuit boards.
   Code numbers of extension printed circuit boards:
   4-fold 4822 395 30262
   5-fold 4822 395 30261

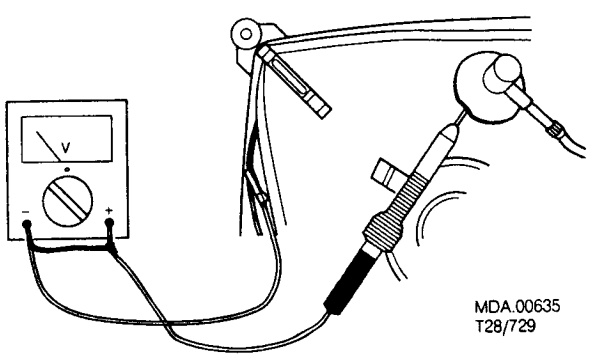


Fig. 1

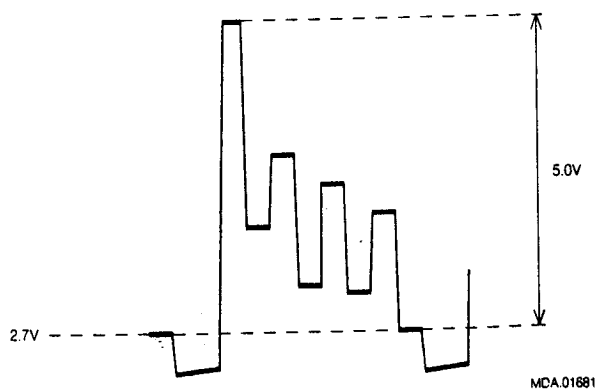


Fig. 2

MECHANICAL INSTRUCTIONS

1. **Servicing position**
   To facilitate troubleshooting and repairing the set, the chassis can, after disconnection of the degaussing coil, be pulled out of the cabinet, turned 180°, and placed behind it.

2. **Flat square picture tube fixation.**
   Demounting the picture tube:
   Loosen the nuts by turning them with a box spanner hexagon (10 mm) **clockwise**, (see Fig. 3).

   Mounting the picture tube:
   Turn the spindles **counterclockwise** into the mask with a box spanner hexagon (4 mm).
   Locate the picture tube in the mask. The easiest way is placing the cabinet with the front facing down.
   Position the picture tube in the middle of the mask.
   Turn the spindles **clockwise** until the nut can be fixed onto the spindle.
   Turn the nut **counterclockwise** finger-tight against the picture tube fixation.
   Turn the spindle **clockwise** until the whole has been fixed tightly (the nut must not turn any more).

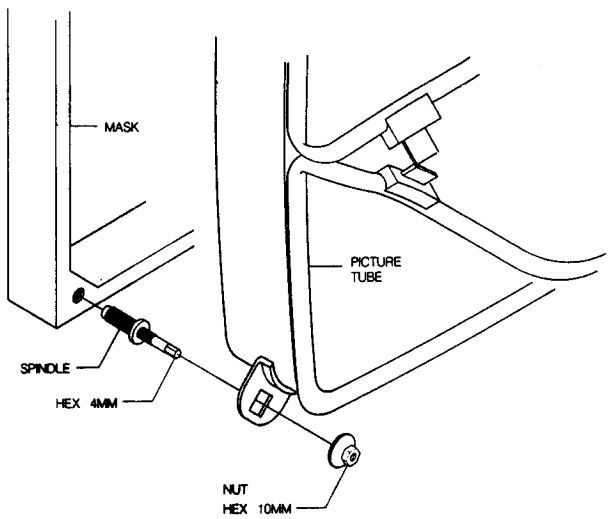


Fig. 3

3. Servicing of SMDs (Surface Mounted Devices)

3.1 General cautions on handling and storage.

a) Oxidation on the SMDs terminals results in poor soldering. Do not handle SMDs with bare hands.
b) Avoid for storage places that are sensitive to oxidation such as places with sulfur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity.
   As a result the capacitance or resistance value of the SMDs may be affected.
c) Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress.
   Never rub or scrape chip components as this may cause the value of the component to change.
   Similarly, do not slide the circuit board across any surface.

3.2 Removal of SMDs

a) Heat the solder (for 2–3 seconds) at each terminal of the chip. Small components can, by means of litz wire and a limited horizontal force, be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 4) or
b) While holding the SMD with a pair of tweezers take it off gently using the soldering iron's heat applied to each terminal (see Fig. 4B).
c) Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 4C).

Caution on removal:

a) When handling the soldering iron, use suitable pressure and be careful.
b) When removing the chip, do not use undue force with the pair of tweezers.
c) The soldering iron to be used (approx. 30 W), must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
d) The chip, once removed, must **never** be used again.

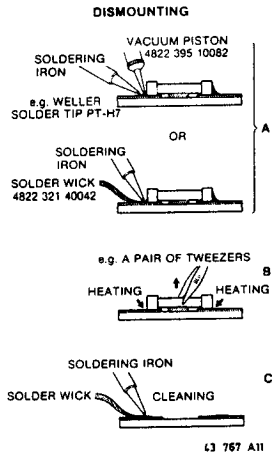


Fig. 4

3.3 Attachment of SMDs

a) Locate the SMD on the solder lands by means of tweezers and solder the component at one side. Ensure that the component is positioned well on the solder lands (see Fig. 5A).
b) Next complete the soldering of the terminals of the component (see Fig. 5B).

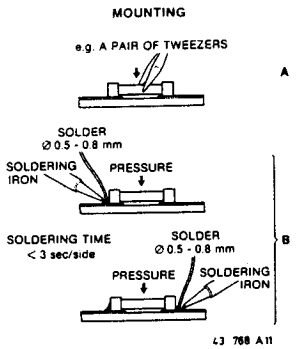


Fig. 5

10. The picture demodulator
Connect a signal generator (e.g. PM5326) as shown in Fig. 10 and adjust it for a frequency of 38.9 MHz (PAL I: 39.5 MHz). Modulate (AM) the signal with 1 kHz. Unsolder resistor 3001 at one side (power supply voltage for the tuner).
Connect an oscilloscope to pin 22 of IC7020 and adjust 5035 for a maximum (undistorted) signal.
Ensure that the demodulator is not overloaded.
Secure resistor 3001 again by soldering.

11. AFC
Connect a signal generator (e.g. PM 5326) as indicated in Fig. 10 and adjust the frequency for 38.9 MHz (PAL I: 39.5 MHz). Connect a voltmeter to pin 15 of IC7020 and adjust 5034 for 6V (DC).

12. RF AGC
If the picture of a strong local transmitter is reproduced distorted, adjust potentiometer 3012 until the picture is undistorted.

13. The sound section
Apply a generator signal whose sound carrier is (FM) modulated with a frequency of 1 kHz.
Set the generator to the mono mode.
Adjust 5115 for maximum sound output.

14. Adjustments on the teletext decoder
Connect pin 22 of IC7830 to ground. Connect a frequency counter to pin 17 of IC7830 and adjust 5803 for 6.010 MHz ± 2.5 kHz.
Remove the interconnection.

B. ADJUSTMENTS ON THE PICTURE TUBE PANEL
(Fig. 12)

1. Cut-off point of picture tube
Apply a white frame signal. Connect pin 7 of IC7350 to ground.
Adjust brightness and contrast until the DC voltage across potentiometer 3380 is 0V.
Adjust 3412, 3422 and 3432 for a black level of 105V on the collectors of transistors 7406, 7416 and 7426 for 11" sets. For sets larger than 11" the black level should be adjusted for 130V.
Now turn Vg2 potentiometer (see Fig. 8) until the gun that first emits light is just no longer visible. Adjust the two other guns with the respective controls (3412, 3422 or 3432) until just no light will be visible. Remove the interconnection.

2. Grey scale
Apply a test pattern signal and adjust the set for normal operation. Allow the set to warm up for about 10 minutes. Adjust 3380 and 3384 until the desired grey scale has been obtained.

C. ADJUSTMENTS SECAM/PAL TRANSCODER
(see Fig. 13)

1. "Circuit cloche"
Disconnect jumper 9302 at one side.
Apply a signal of a signal generator to capacitor 2316.
Adjust the frequency of the signal generator for 4.286 MHz. Connect an oscilloscope to pin 3 of IC7310.
Adjust 5316 for maximum amplitude.
Connect jumper 9302.

2. Subcarrier oscillator
Apply a 75% SECAM colour bar pattern.
Connect pin 6 of IC7310 by means of a 10k resistor to ground.
Connect a frequency counter with a high input impedance (via a probe C ≤ 2pF) to pin 26 of IC7350.
Adjust 2332 for a frequency of 8.867236 MHz.
Disconnect the resistor.

3. SECAM demodulator
Apply a SECAM black frame signal.
Connect an oscilloscope to pin 14 of IC7310.
Adjust 3347 and 5347 for a minimum modulation.

4. Delay line
a. Amplitude
Apply a SECAM red frame signal. Connect an oscilloscope to pin 28 of IC7350 .
Adjust 3335 for an equal amplitude of the lines.
b. Phase
Adjust for normal brightness and contrast.
Connect an oscilloscope to pin 16 of IC7350.
Apply a 75% PAL colour bar pattern.
Adjust the saturation control for an as flat signal as possible.
Then apply a 75% SECAM colour bar pattern.
Adjust 5337 so that the signal is virtually flat again.

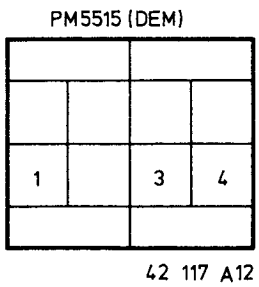


Fig. 9

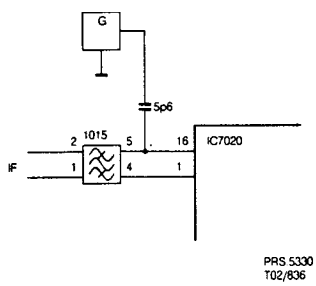


Fig. 10

Caution on attachment:

a) When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering must be as quick as possible; care must be taken to avoid damage to the terminals and the body itself.
b) Keep the SMD's body in contact with the printed board when soldering.
c) The soldering iron to be used (approx. 30 W) must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
d) Soldering should not be done outside the solder land.
e) Soldering flux (of rosin) may be used but should not be acidic.
f) After soldering, let the SMD cool down gradually at room temperature.
g) The quantity of solder must be proportional with the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 6).

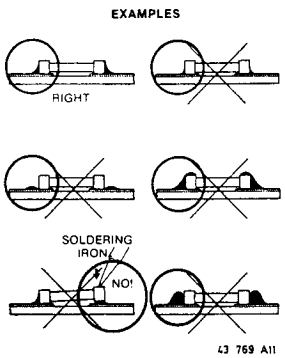


Fig. 6

4. Installation instructions for the SECAM/PAL transcoder

Mount connectors 4822 417 50217 and 4822 267 40648, if not present, at positions M8 and M9.
Remove SMD-jumpers 3318 and 3319.
Place the SECAM/PAL transcoder on connectors M8 and M9.
Mount bracket 4822 404 30991 as indicated in Fig. 8.
The set is now capable of receiving both PAL B/G and SECAM B/G.

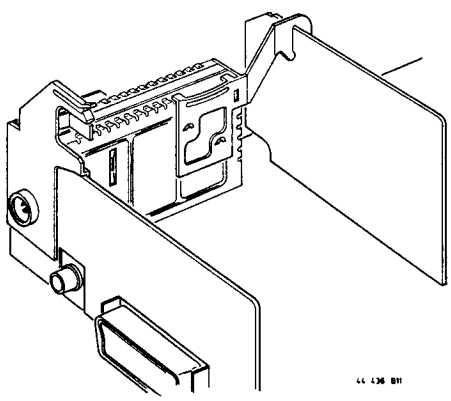


Fig. 7

ELECTRICAL INSTRUCTIONS

A. Adjustments on the main panel
(Fig. 11)

1. +95V power supply voltage
Connect a voltmeter (DC) between pin 5 of connector A5 and ground. Adjust potentiometer 3635 for a voltage of +95V.

2. Horizontal synchronization
Interconnect pins 5 and 9 of IC7470.
Apply an aerial signal and tune the receiver.
Adjust potentiometer 3457 until the picture is straight.
Remove the interconnection.

3. Horizontal centring
Is adjusted with potentiometer 3461.

4. Picture width
Is adjusted with potentiometer 3525.

5. Vertical centring
Is adjusted with switch SK11.

6. Picture height
Is adjusted with potentiometer 3510.

7. Focussing
Is adjusted with the focussing potentiometer in the line output transformer (see Fig. 8).

8. Chroma subcarrier oscillator
Apply a colour-bar pattern. Interconnect pins 23 and 24 of IC7350. Connect a 470Ω resistor between pins 1 and 6 of IC7350. Adjust 2352 so that colour pattern on the screen is practically stationary.
Remove the resistor and the interconnection.

9. PAL delay line
Apply a generator signal from a PM5515. Set the generator to "DEM". Set contrast and brightness to normal and set the saturation control to 3/4 of its range. Adjust potentiometer 3334 so that the venetian-blinds effect in the 3rd bar is minimal (see Fig. 9). Subsequently, adjust 5330 until the venetian-blinds effect in the 1st and the 4th bar is also minimal. Readjust 3274 if necessary.

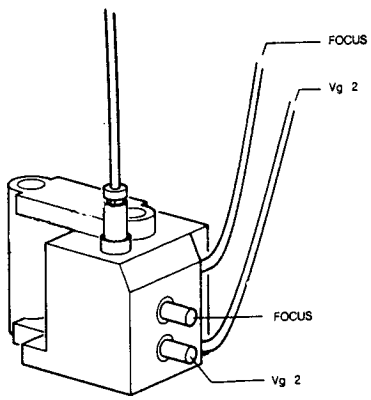


Fig. 8

CARRIER PANEL

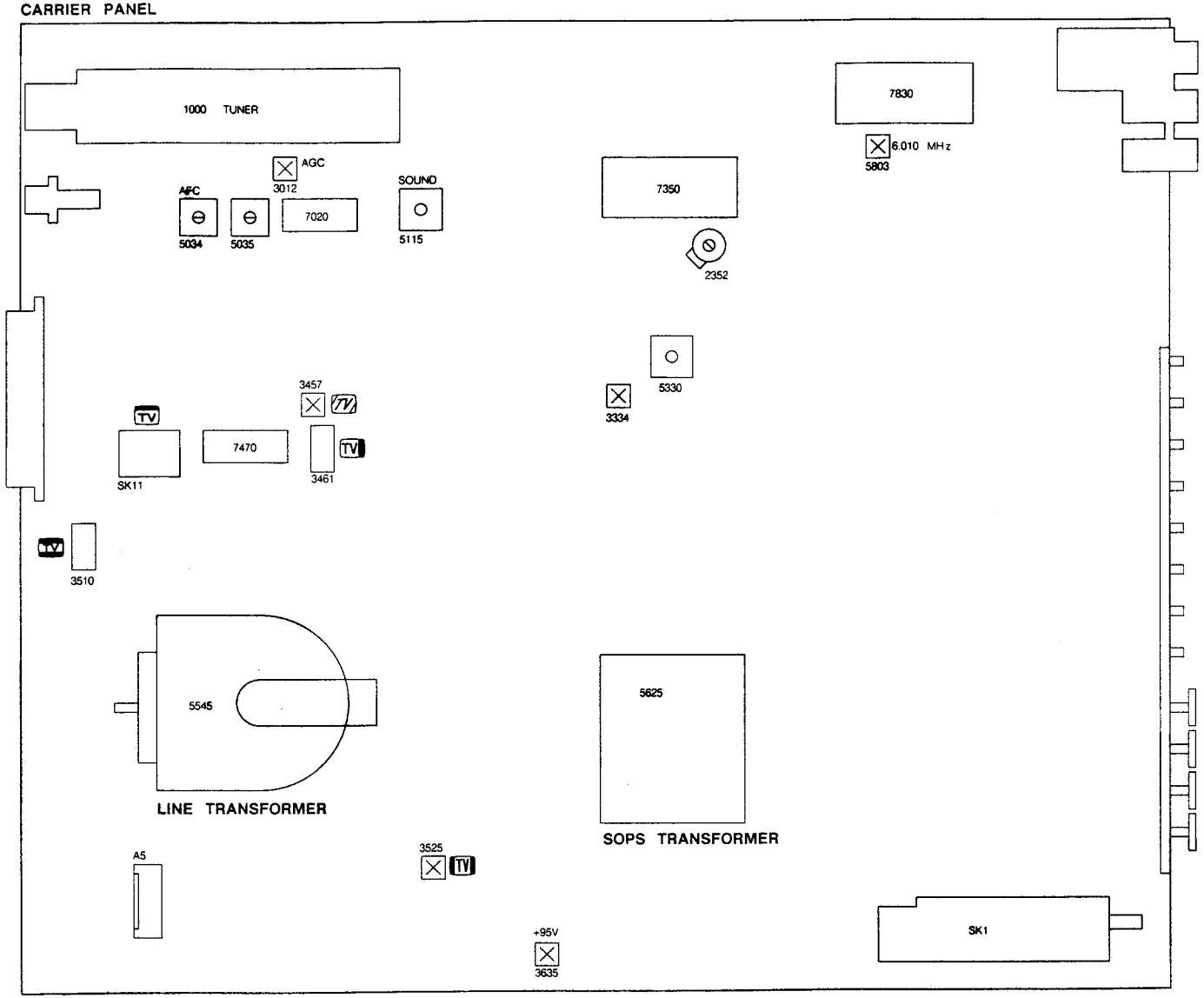


Fig. 11

CRT PANEL

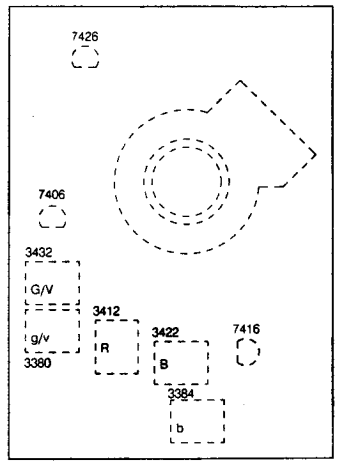


Fig. 12

SECAM/PAL TRANSCODER

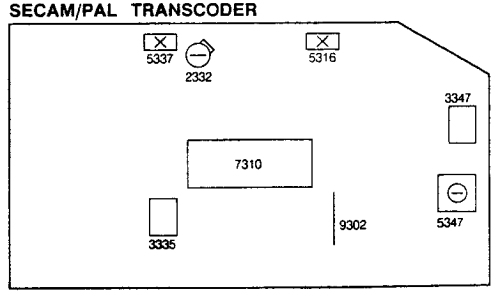


Fig. 13

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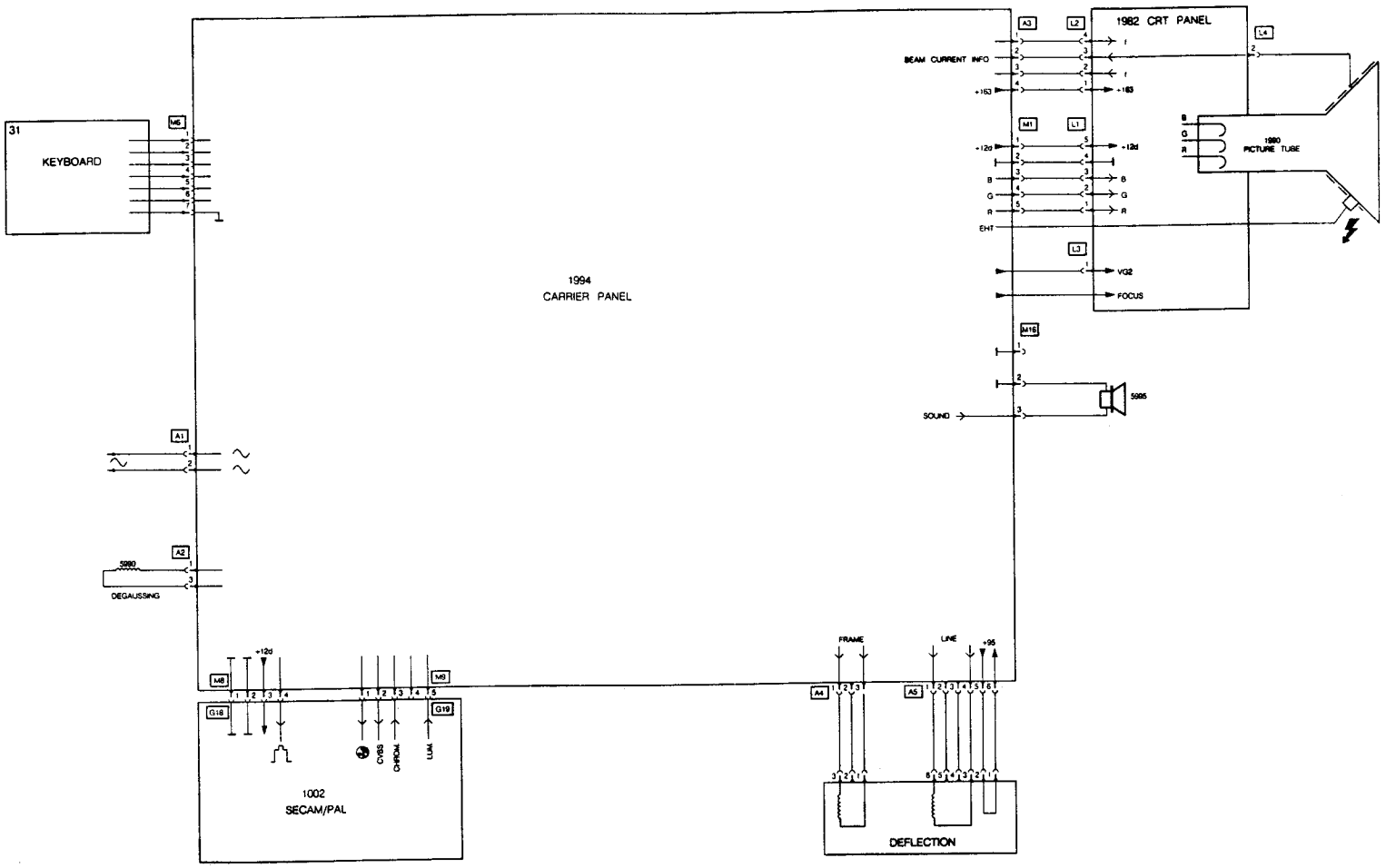
CHASSIS G90AE



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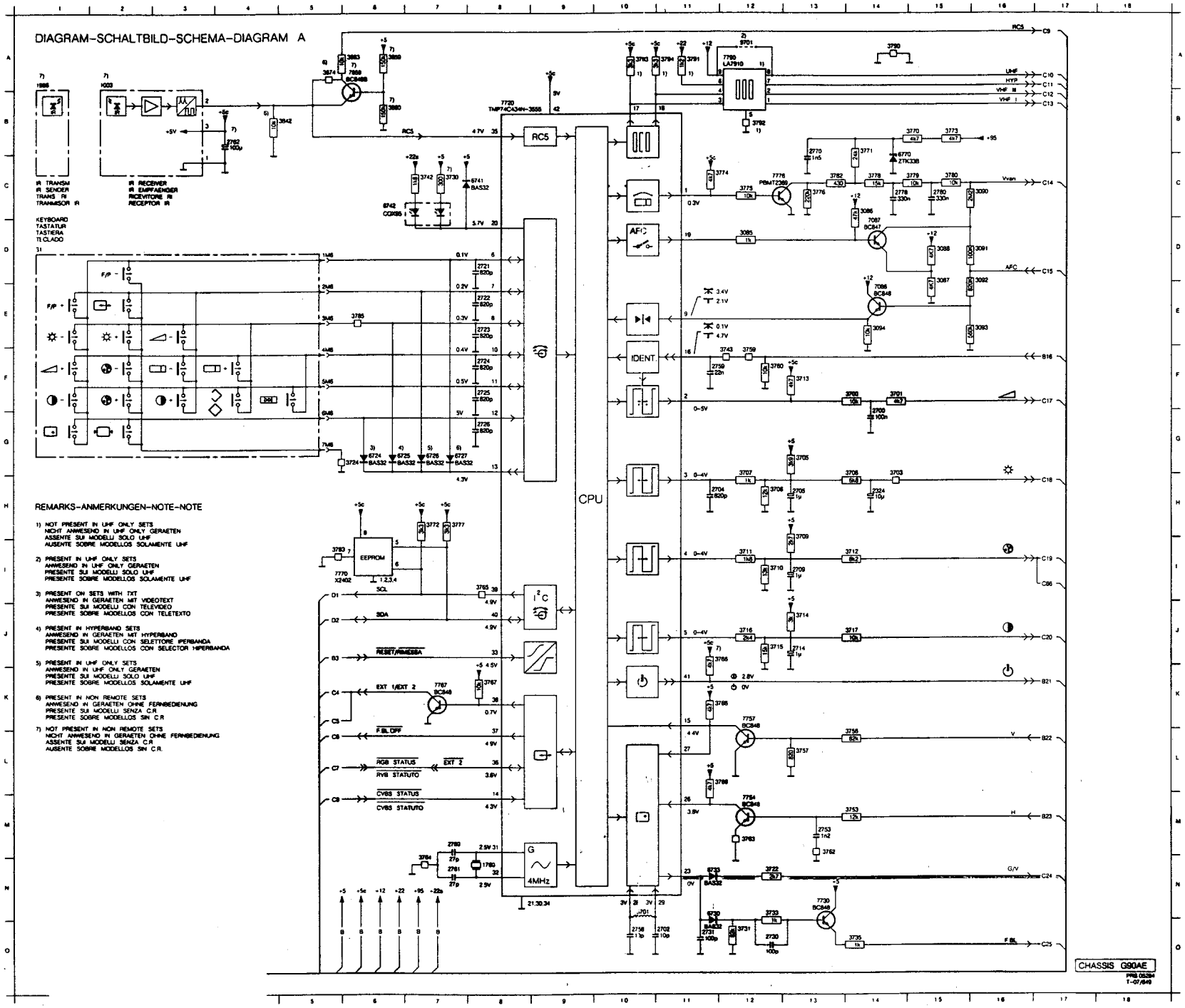
DIAGRAM-SCHALTBILD-SCHEMA-DIAGRAM A
IR TRANSM
IR SENDER
TRANS IR
TRANMISOR IR
IR RECEIVER
IR EMPFAENGER
RICEVITORE IR
RECEPTOR IR
KEYBOARD
TASTATUR
TASTIERA
TECLADO
CPU
RC5
AFC
IDENT
EEPROM
SCL
SDA
RESET/RIMESSA
EXT 1/EXT 2
F.BL.OFF
RGB STATUS
RVB STATUTO
CVBS STATUS
CVBS STATUTO
4MHz
REMARKS-ANMERKUNGEN-NOTE-NOTE
1) NOT PRESENT IN UHF ONLY SETS
NICHT ANWESEND IN UHF ONLY GERAETEN
ASSENTE SUI MODELLI SOLO UHF
AUSENTE SOBRE MODELLOS SOLAMENTE UHF
2) PRESENT IN UHF ONLY SETS
ANWESEND IN UHF ONLY GERAETEN
PRESENTE SUI MODELLI SOLO UHF
PRESENTE SOBRE MODELLOS SOLAMENTE UHF
3) PRESENT ON SETS WITH TXT
ANWESEND IN GERAETEN MIT VIDEOTEXT
PRESENTE SUI MODELLI CON TELEVIDEO
PRESENTE SOBRE MODELLOS CON TELETEXTO
4) PRESENT IN HYPERBAND SETS
ANWESEND IN GERAETEN MIT HYPERBAND
PRESENTE SUI MODELLI CON SELETTORE IPERBANDA
PRESENTE SOBRE MODELLOS CON SELECTOR HIPERBANDA
5) PRESENT IN UHF ONLY SETS
ANWESEND IN UHF ONLY GERAETEN
PRESENTE SUI MODELLI SOLO UHF
PRESENTE SOBRE MODELLOS SOLAMENTE UHF
6) PRESENT IN NON REMOTE SETS
ANWESEND IN GERAETEN OHNE FERNBEDIENUNG
PRESENTE SUI MODELLI SENZA C.R
PRESENTE SOBRE MODELLOS SIN C.R
7) NOT PRESENT IN NON REMOTE SETS
NICHT ANWESEND IN GERAETEN OHNE FERNBEDIENUNG
ASSENTE SUI MODELLI SENZA C.R
AUSENTE SOBRE MODELLOS SIN C.R.
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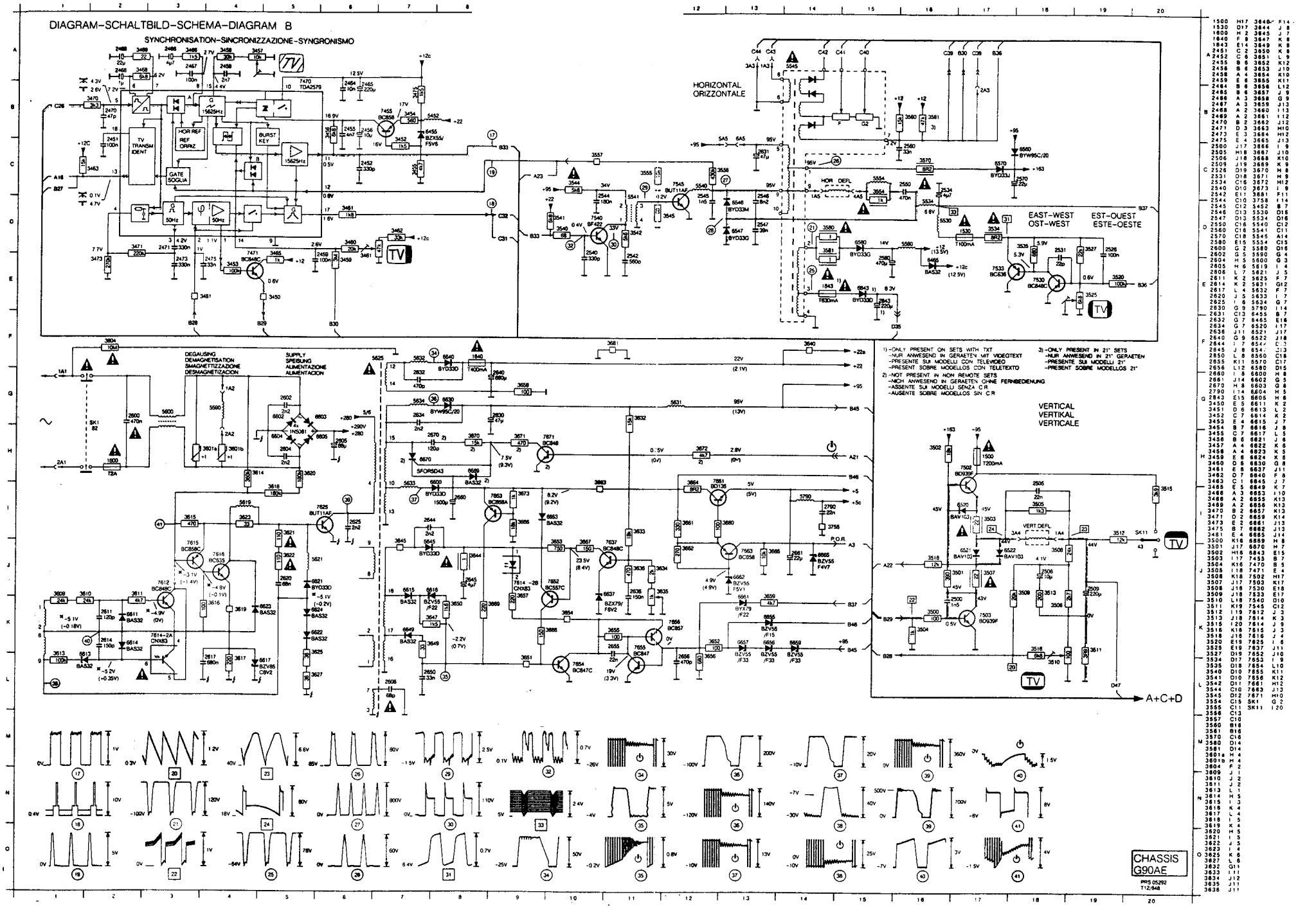
DIAGRAM-SCHALTBILD-SCHEMA-DIAGRAM 8
SYNCHRONISATION-SINCRONIZZAZIONE-SYNGRONISMO
HORIZONTAL
ORIZZONTALE
EAST-WEST
OST-WEST
EST-OUEST
ESTE-OESTE
VERTICAL
VERTIKAL
VERTICALE
DEGAUSING
DEMAGNETISATION
SMAGNETIZZAZIONE
DESMAGNETIZACION
SUPPLY
SPEISUNG
ALIMENTAZIONE
ALIMENTACION
1) -ONLY PRESENT ON SETS WITH TXT
-NUR ANWESEND IN GERAETEN MIT VIDEOTEXT
-PRESENTE SUI MODELLI CON TELEVIDEO
-PRESENT SOBRE MODELLOS CON TELETEXTO
2) -NOT PRESENT IN NON REMOTE SETS
-NICH ANWESEND IN GERAETEN OHNE FERNBEDIENUNG
-ASSENTE SUI MODELLI SENZA C/R
-AUSENTE SOBRE MODELLOS SIN C/R
3) -ONLY PRESENT IN 21" SETS
-NUR ANWESEND IN 21" GERAETEN
-PRESENTE SUI MODELLI 21"
-PRESENT SOBRE MODELLOS 21"
A+C+D
CHASSIS
G90AE
PRS 05292
T12/94B

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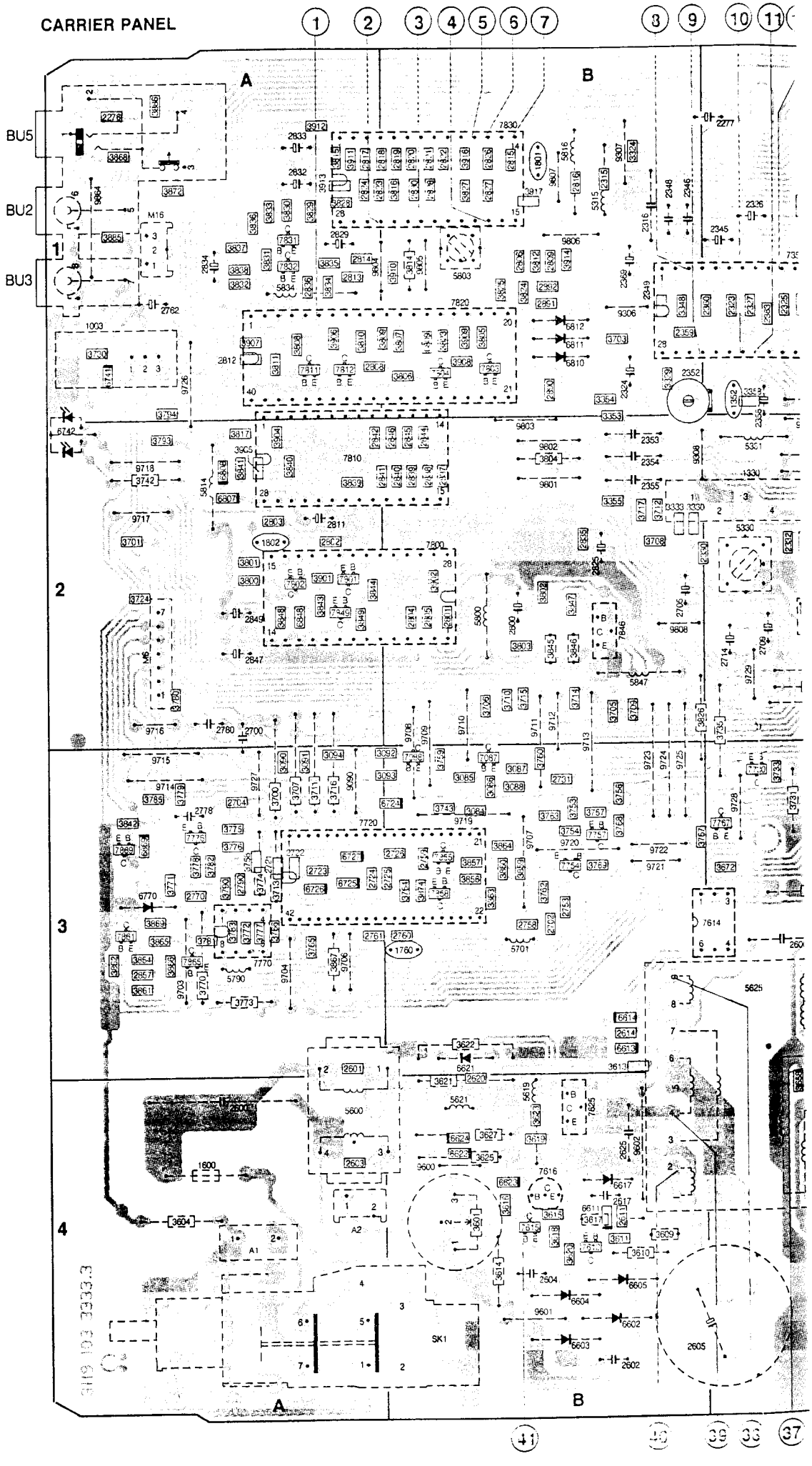
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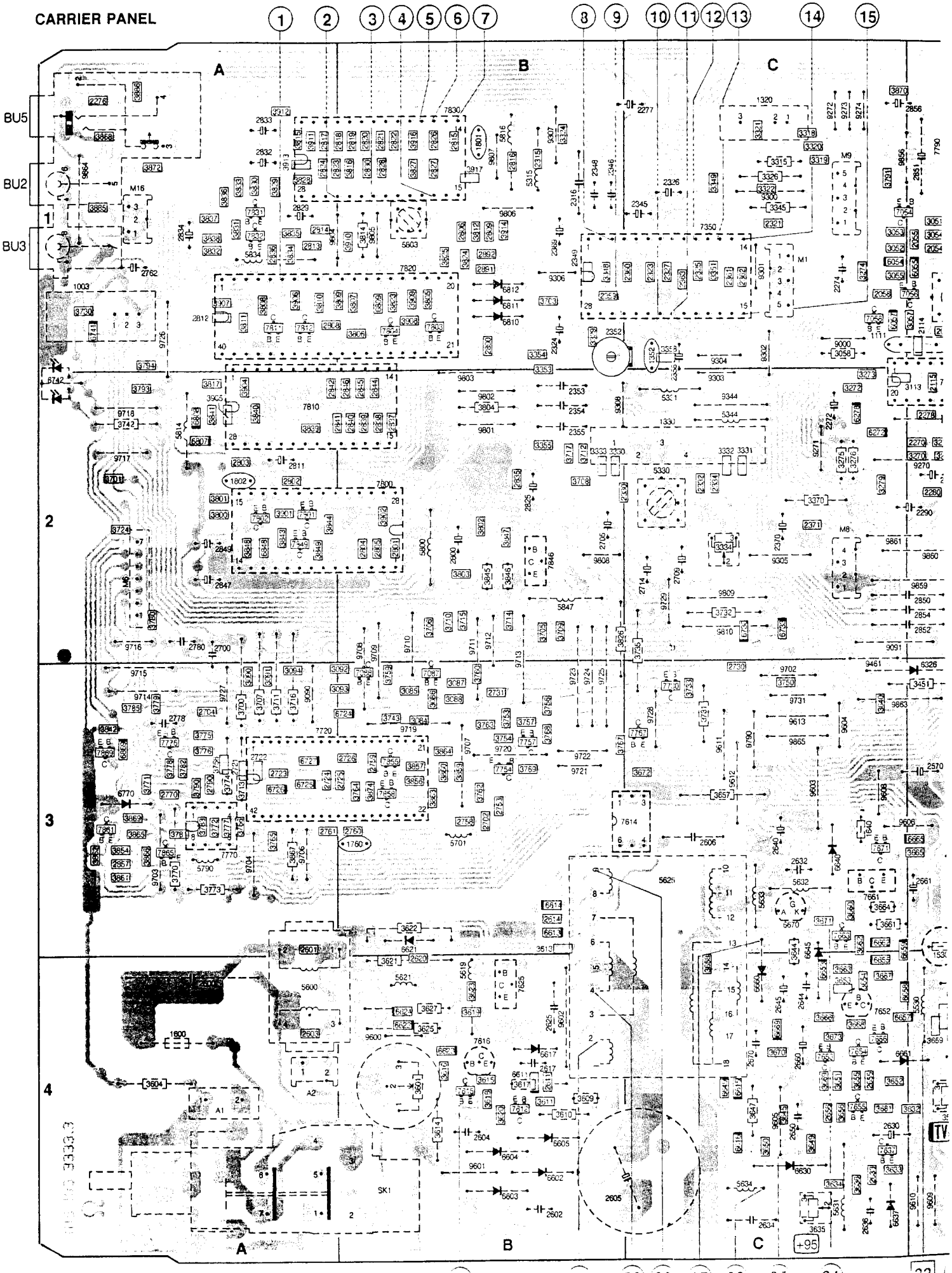

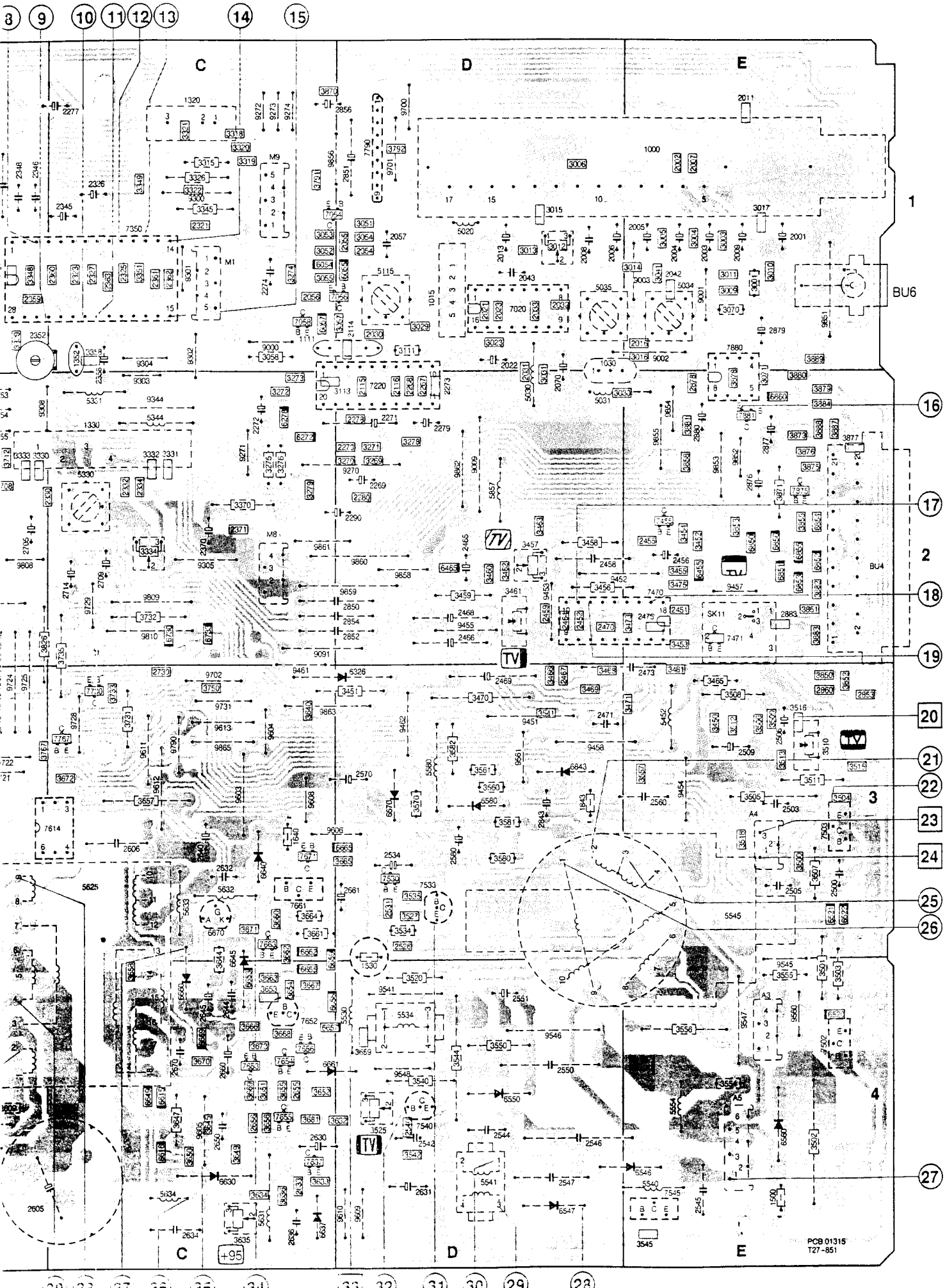
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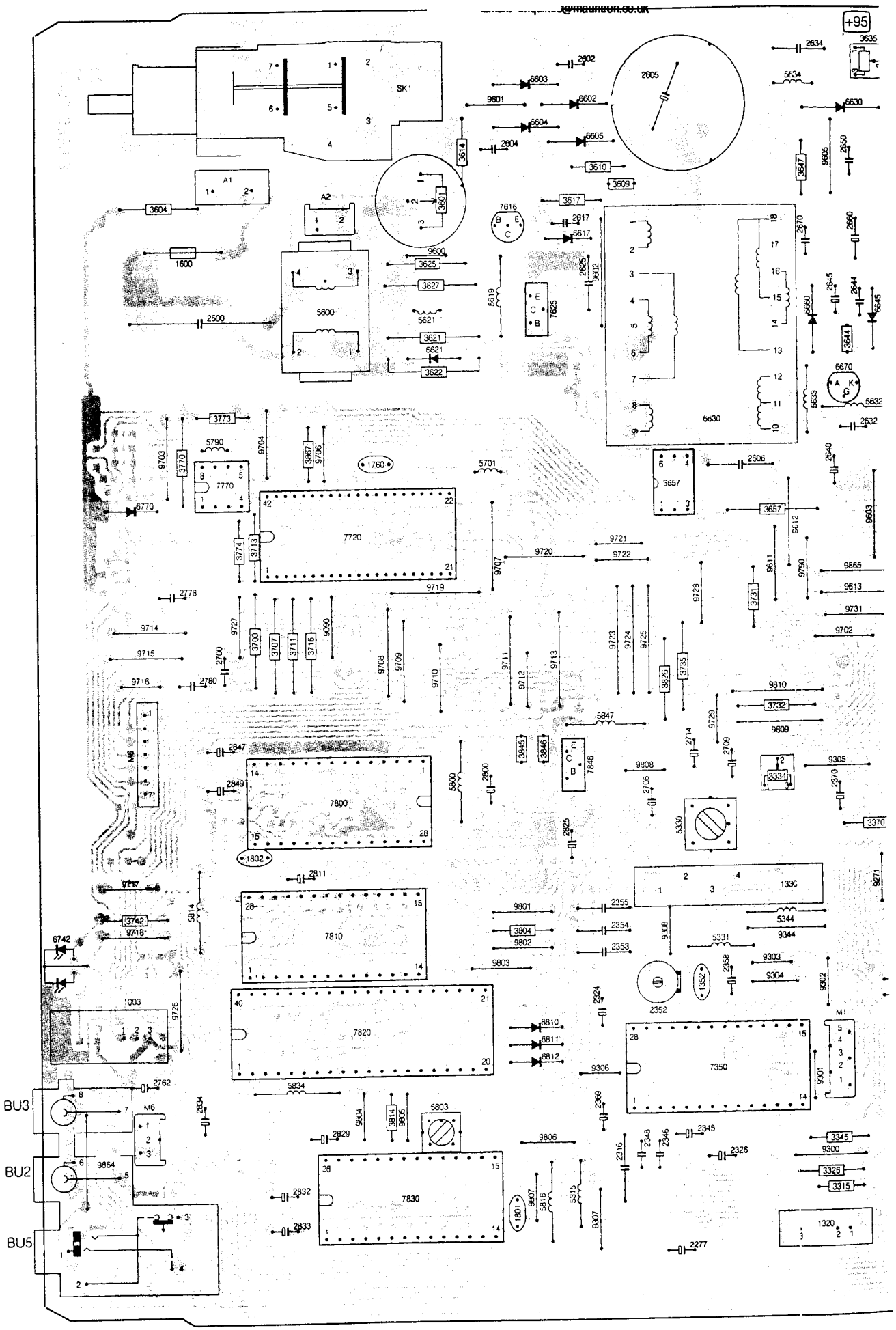

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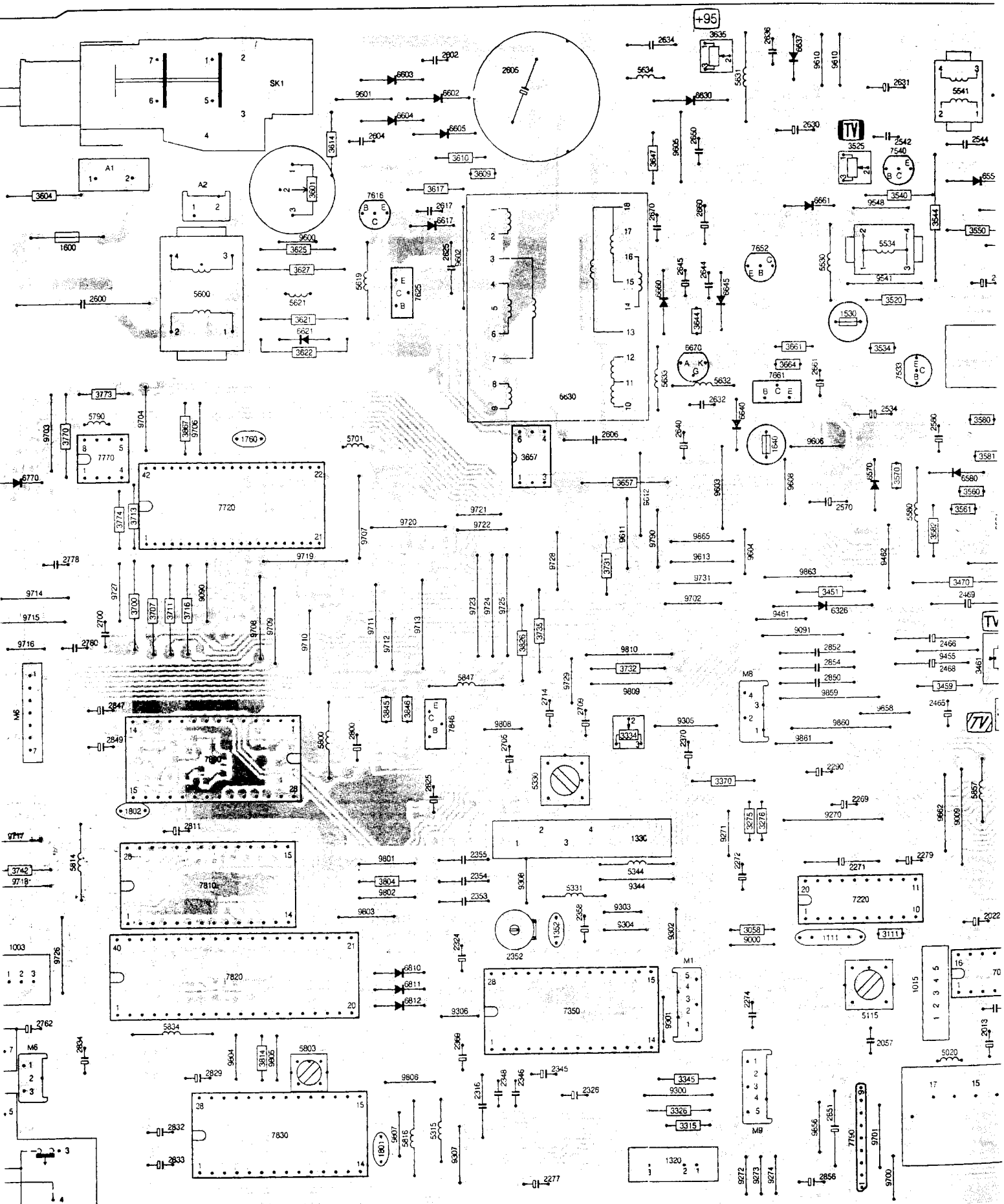
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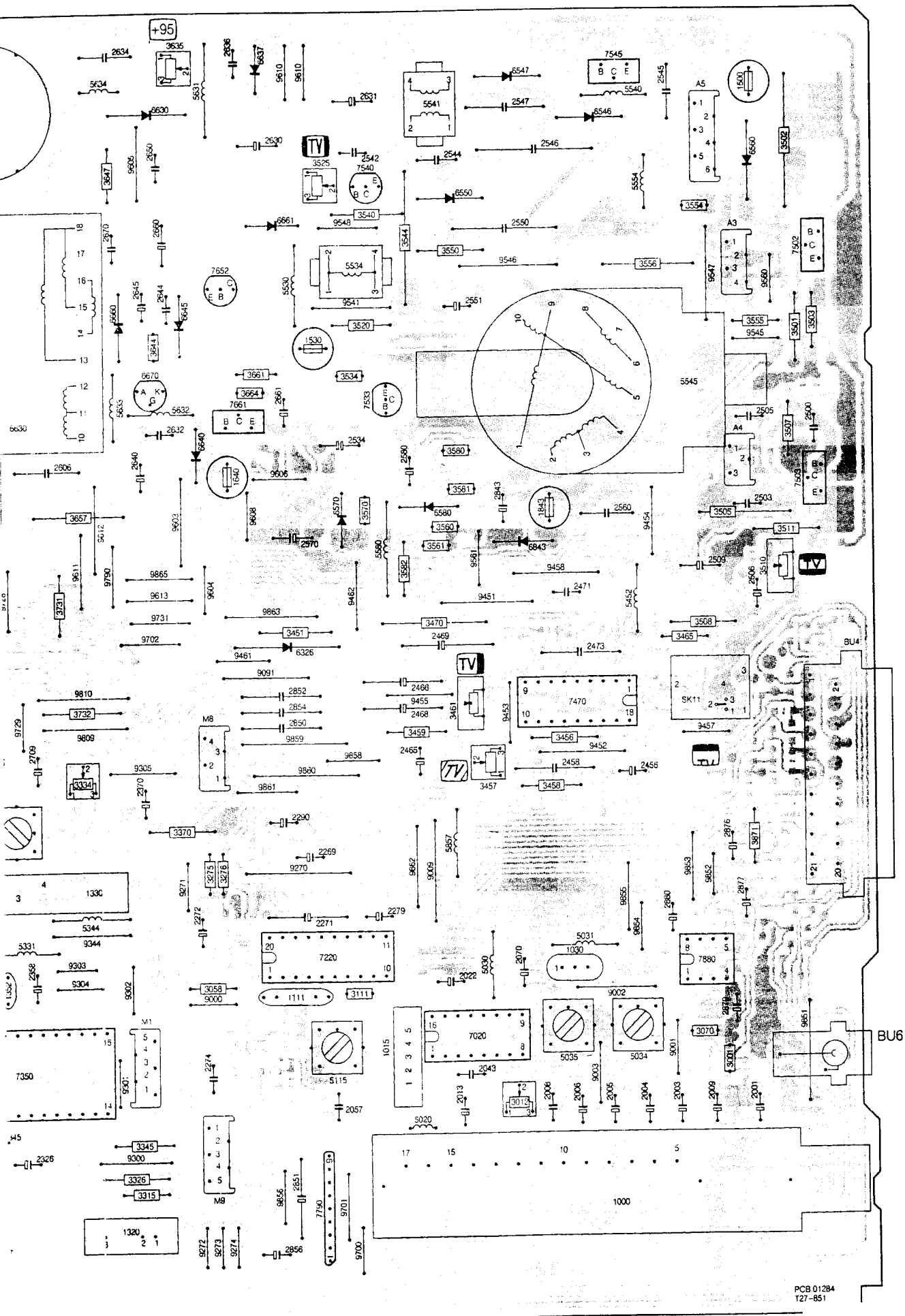
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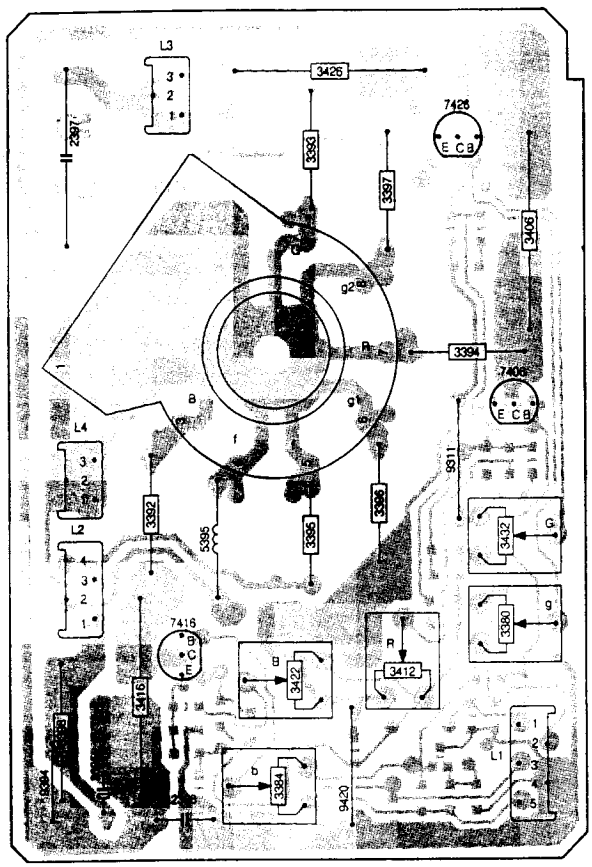

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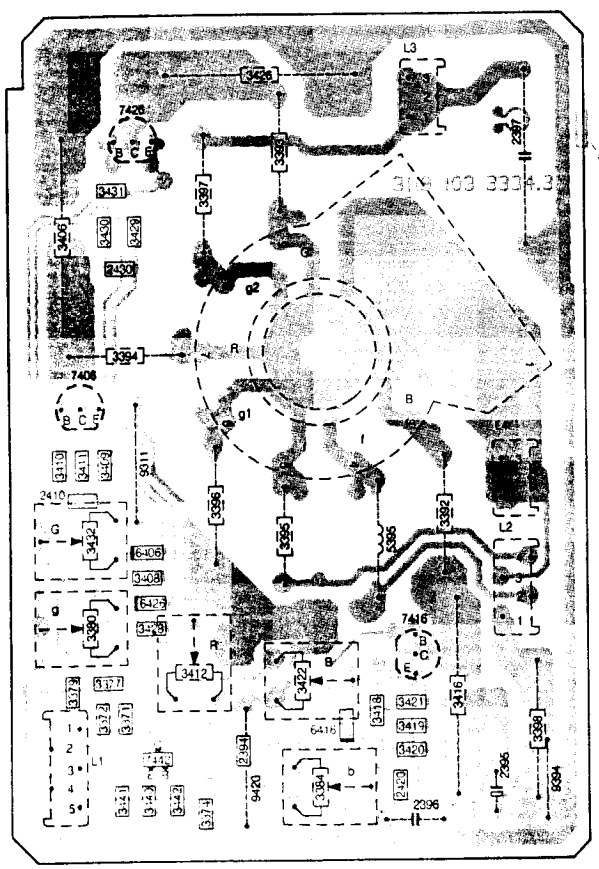
PICTURE TUBE PANEL



PCB.01317

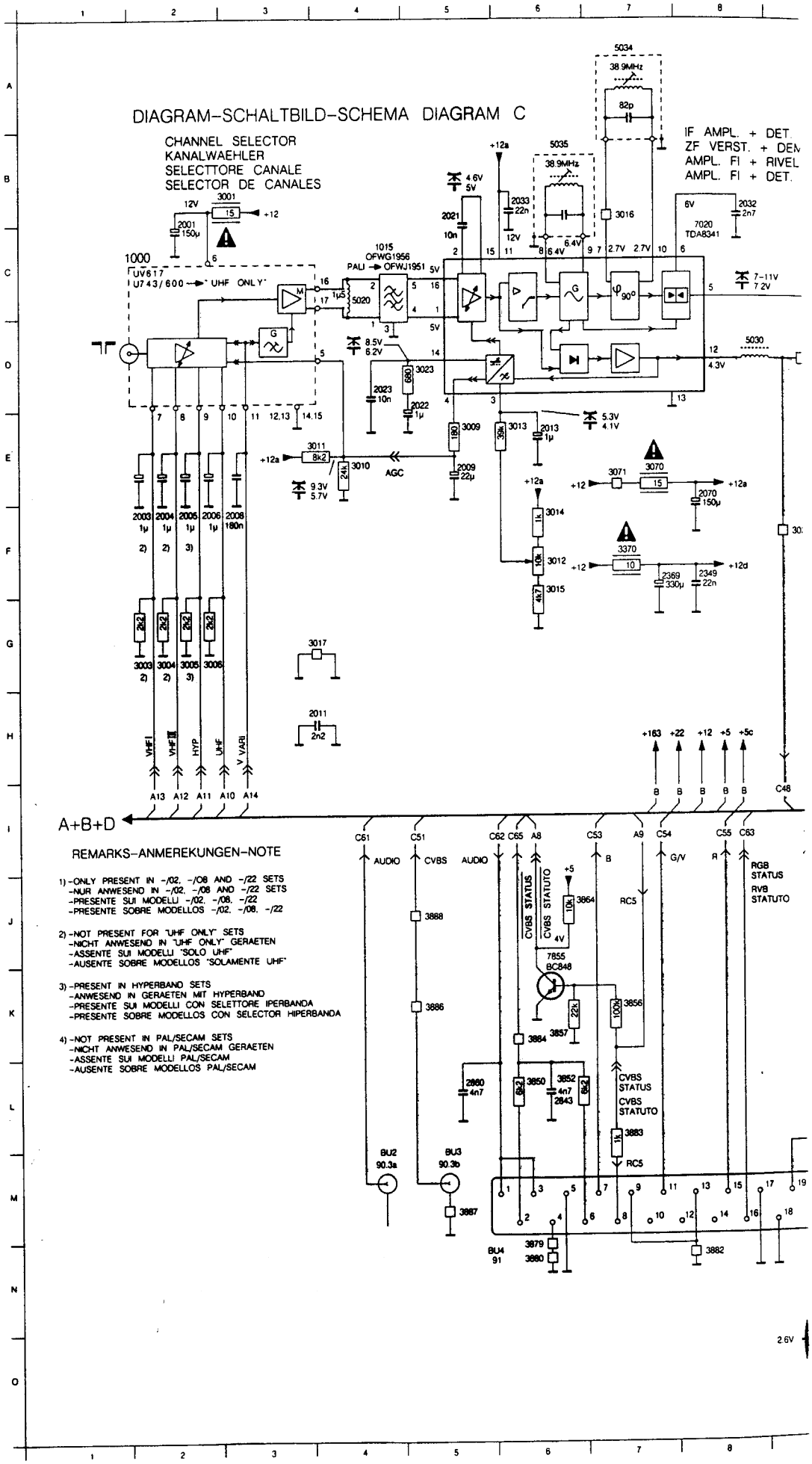
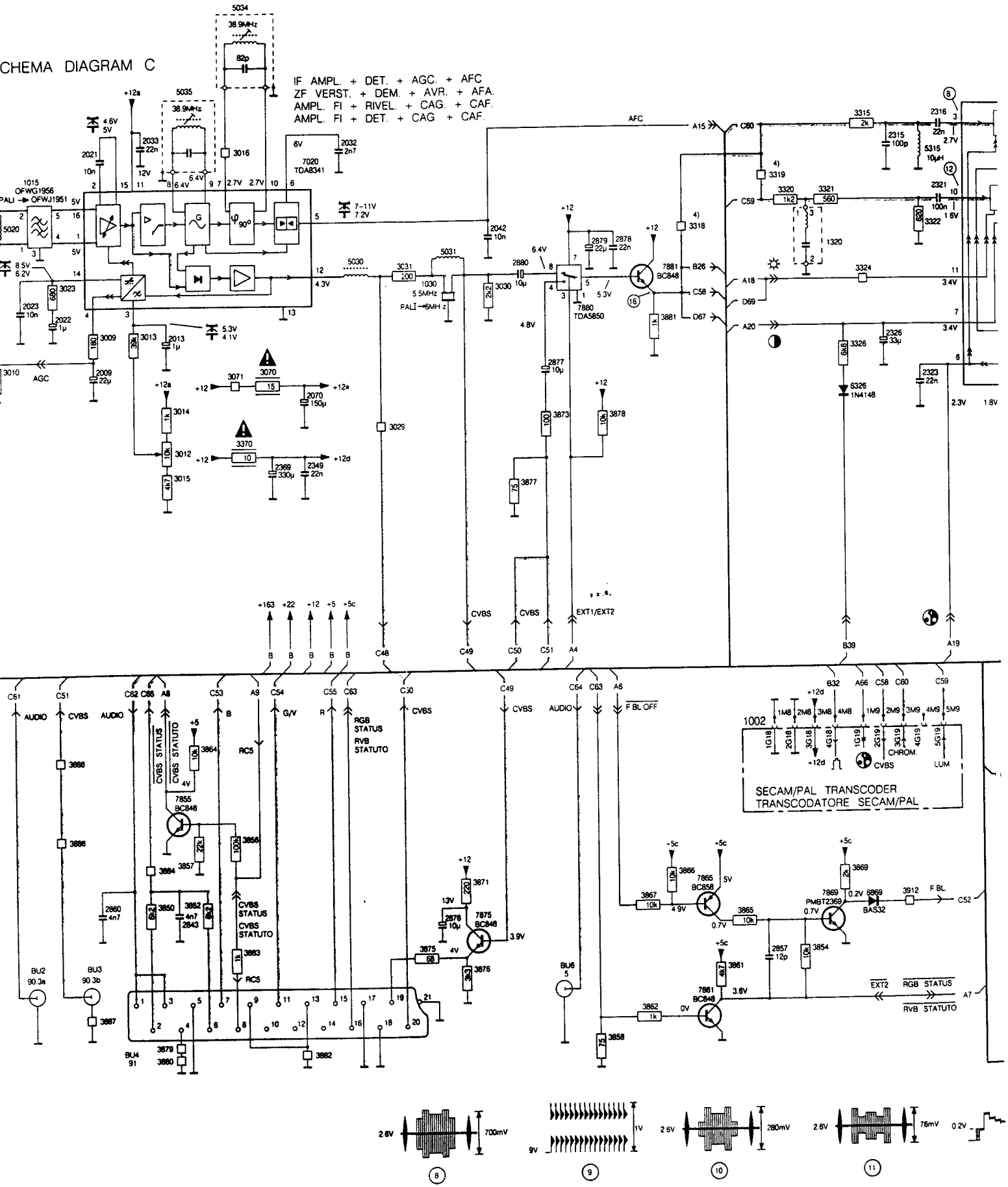
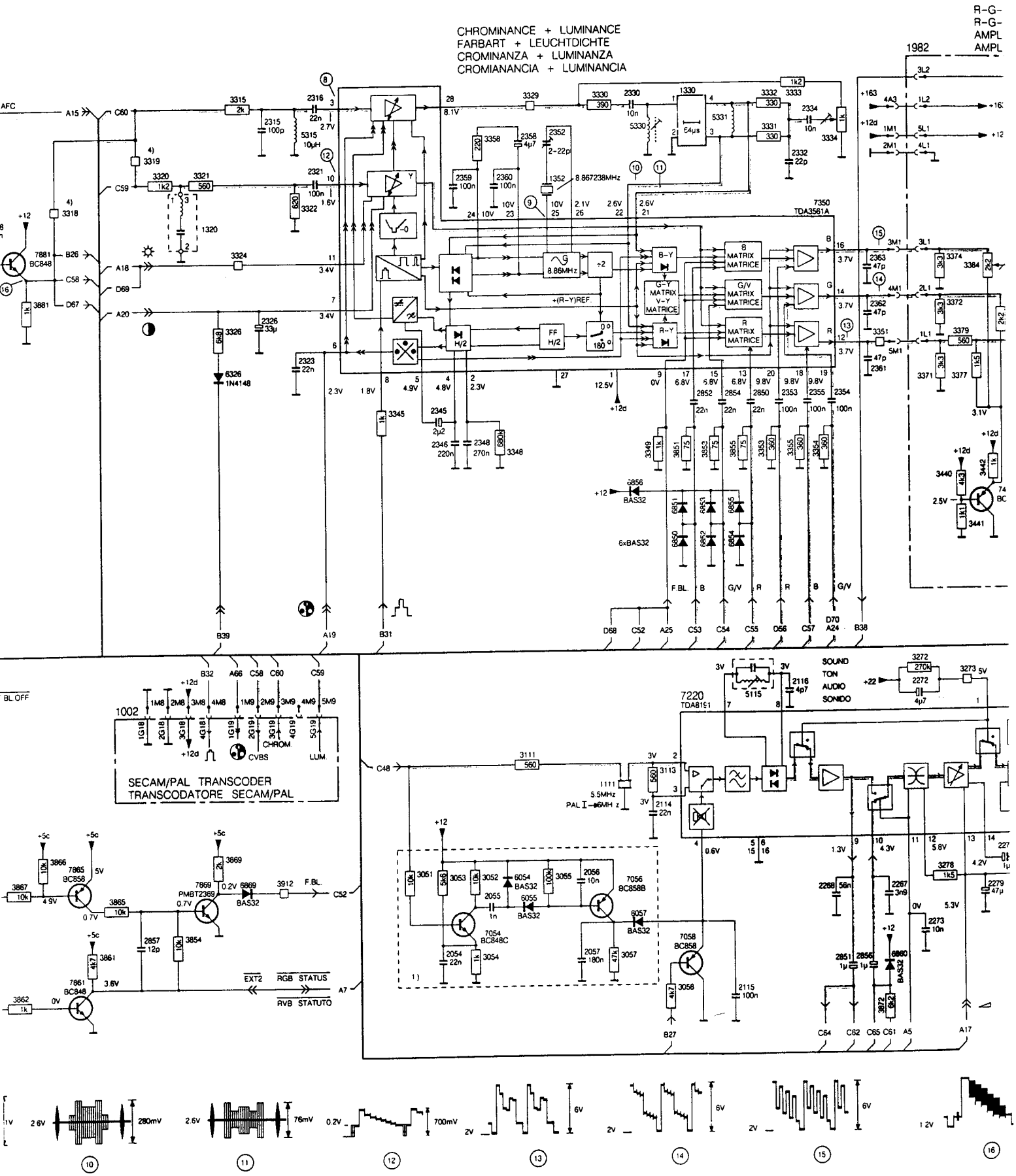


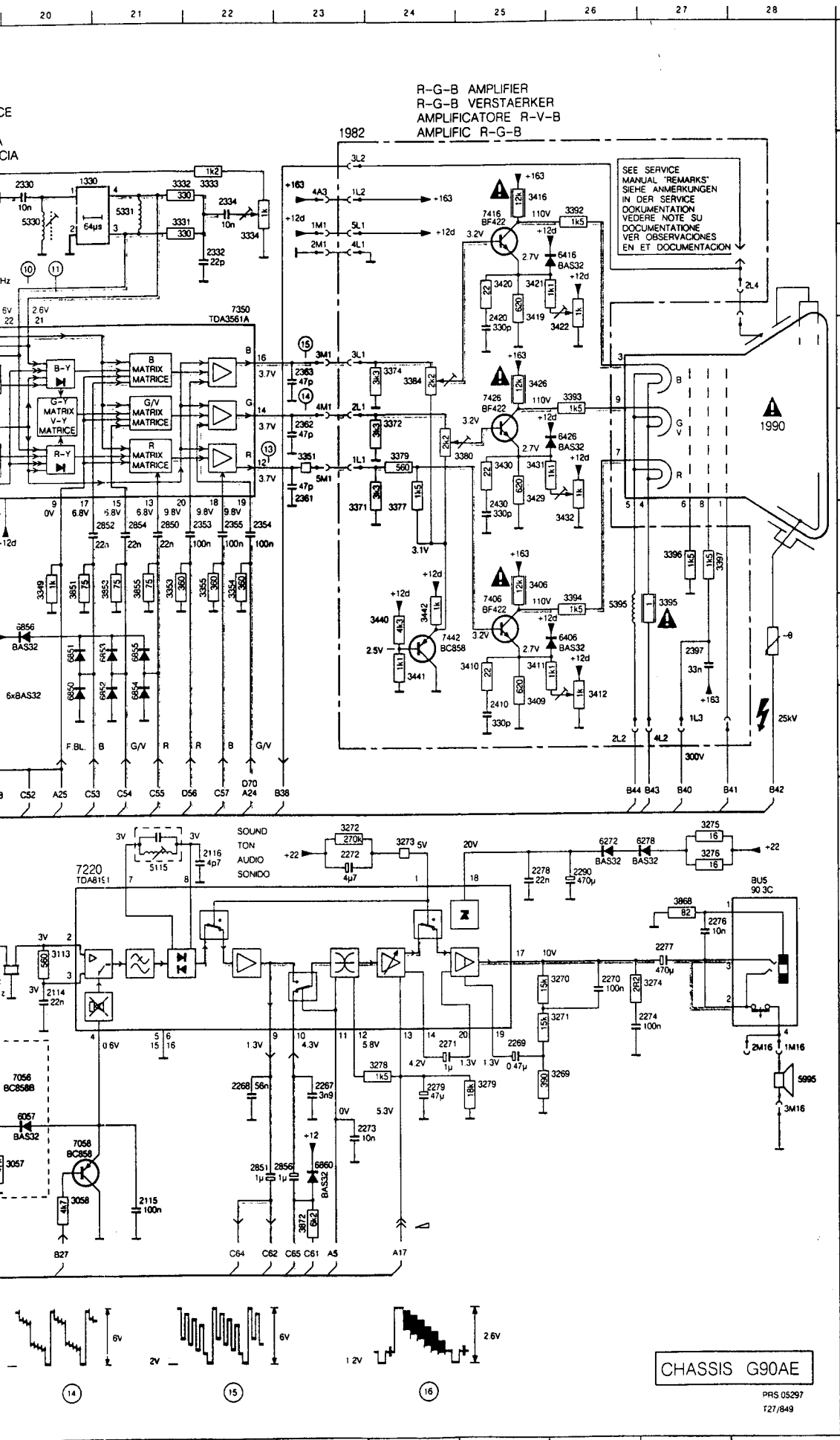
DIAGRAM-SCHALTBILD-SCHEMA DIAGRAM C
CHANNEL SELECTOR
KANALWAEHLER
SELECTTORE CANALE
SELECTOR DE CANALES
IF AMPL. + DET.
ZF VERST. + DEM
AMPL. FI + RIVEL
AMPL. FI + DET.
A+B+D
REMARKS-ANMEREKUNGEN-NOTE
1) -ONLY PRESENT IN -/02, -/08 AND -/22 SETS
-NUR ANWESEND IN -/02, -/08 AND -/22 SETS
-PRESENTE SUI MODELLI -/02, -/08, -/22
-PRESENTE SOBRE MODELLOS -/02, -/08, -/22
2) -NOT PRESENT FOR "UHF ONLY" SETS
-NICHT ANWESEND IN "UHF ONLY" GERAETEN
-ASSENTE SUI MODELLI "SOLO UHF"
-AUSENTE SOBRE MODELLOS "SOLAMENTE UHF"
3) -PRESENT IN HYPERBAND SETS
-ANWESEND IN GERAETEN MIT HYPERBAND
-PRESENTE SUI MODELLI CON SELETTORE IPERBANDA
-PRESENTE SOBRE MODELLOS CON SELECTOR HIPERBANDA
4) -NOT PRESENT IN PAL/SECAM SETS
-NICHT ANWESEND IN PAL/SECAM GERAETEN
-ASSENTE SUI MODELLI PAL/SECAM
-AUSENTE SOBRE MODELLOS PAL/SECAM
UV617
U743/600 "UHF ONLY"
1000
1015
OFWG1956
PALI OFWJ1951
5020
5030
5034
5035
38.9MHz
7020
TDA8341
AGC
VHF I
VHF III
HYP
UHF
V VARI
RGB STATUS
RVB STATUTO
CVBS STATUS
CVBS STATUTO
RC5
BC848
BU2 90.3a
BU3 90.3b
BU4 91
2.6V

CHEMA DIAGRAM C

IF AMPL. + DET. + AGC. + AFC
ZF VERST. + DEM. + AVR. + AFA.
AMPL. FI + RIVEL. + CAG. + CAF.
AMPL. FI + DET. + CAG + CAF.

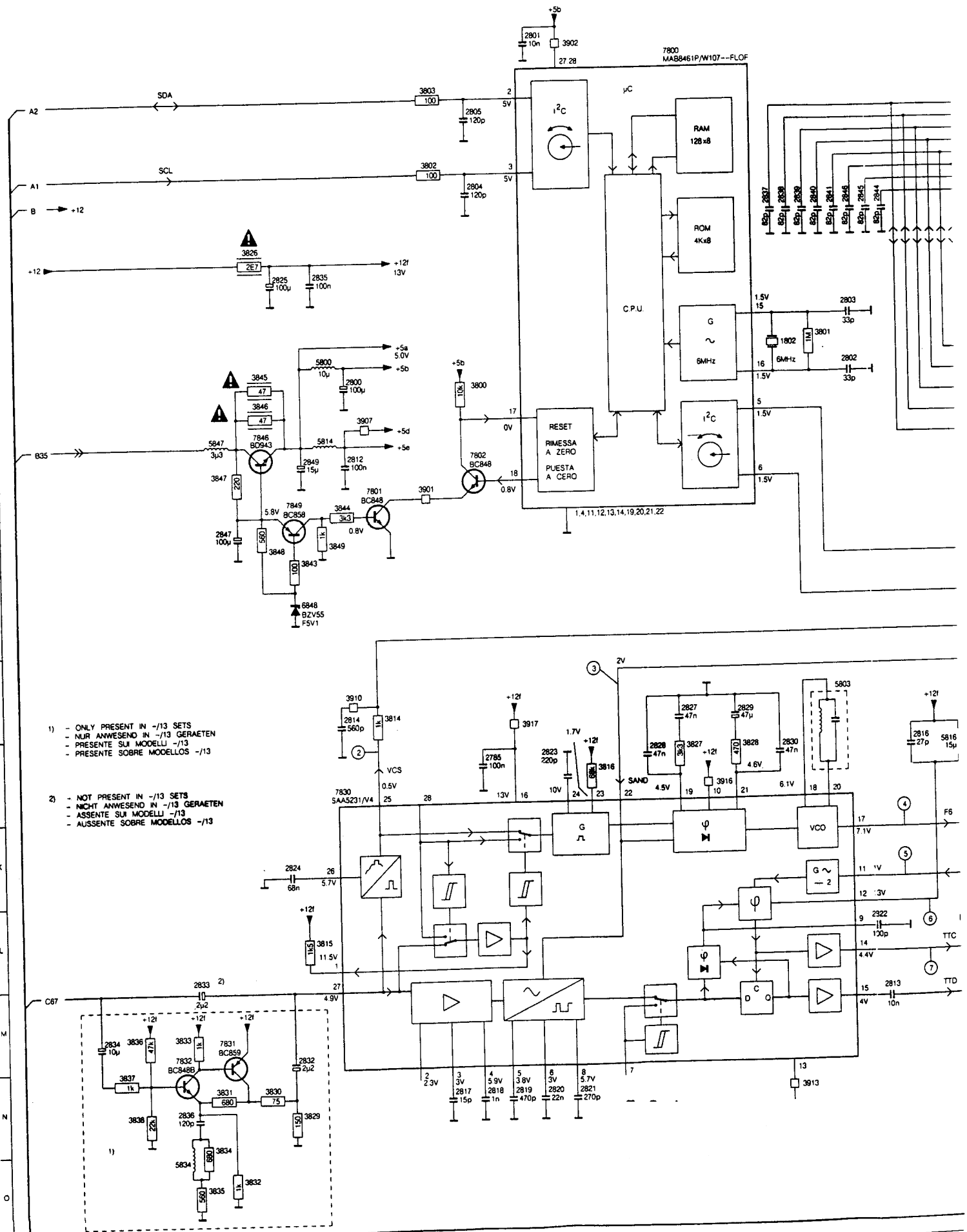



CHROMINANCE + LUMINANCE
FARBART + LEUCHTDICHTE
CROMINANZA + LUMINANZA
CROMIANANCIA + LUMINANCIA
R-G-
AMPL
1982
7350
TDA3561A
8.867238MHz
8.86MHz
B-Y
G-Y
R-Y
MATRIX
FF
H/2
+(R-Y)REF
6xBAS32
F.BL.
SECAM/PAL TRANSCODER
TRANSCODATORE SECAM/PAL
1002
CHROM.
CVBS
LUM.
7220
TDA8151
SOUND
TON
AUDIO
SONIDO
5.5MHz
PAL I
EXT2
RGB STATUS
RVB STATUTO

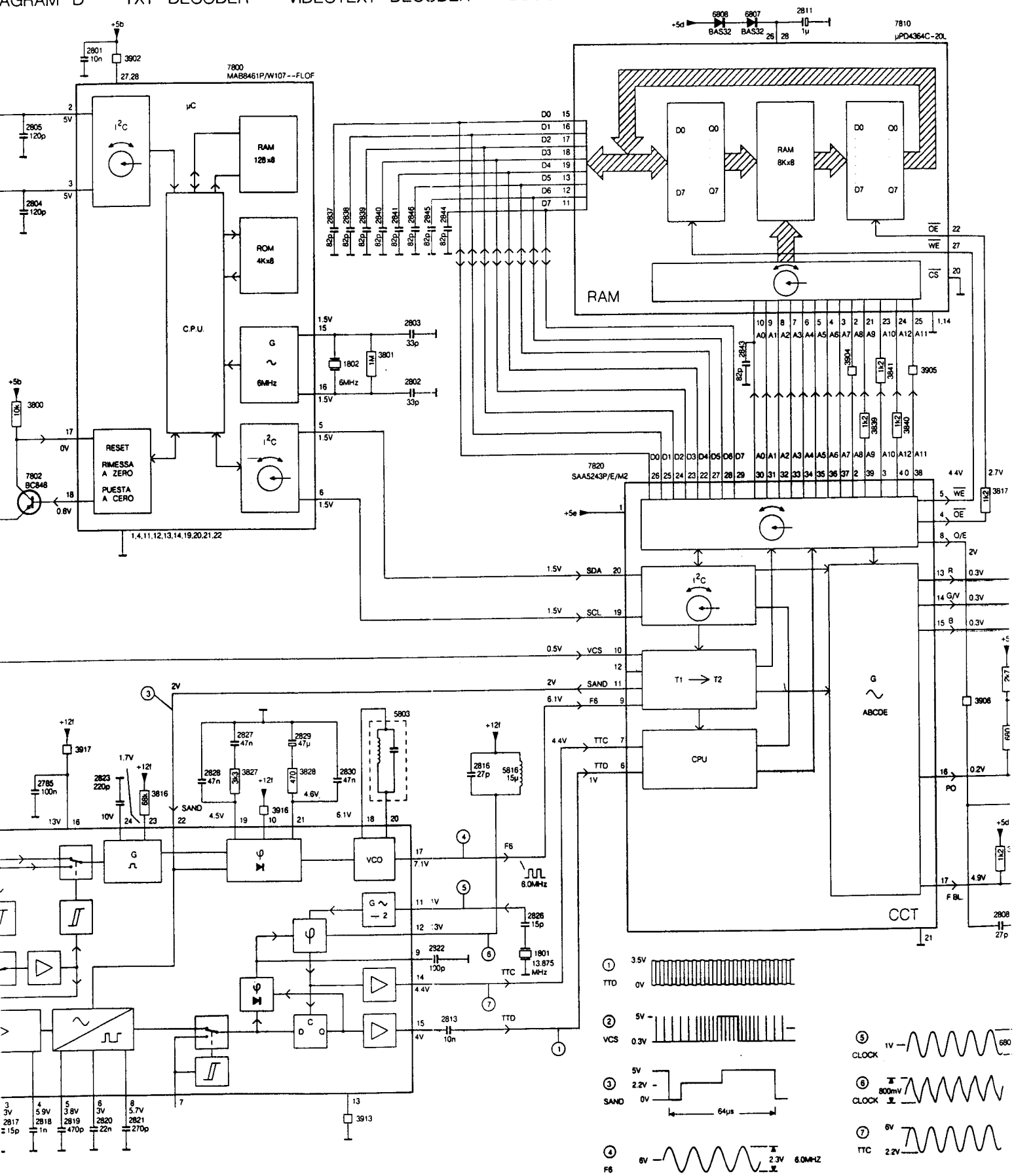


1000	C 2	3354	G22
1002	J13	3355	F22
1015	C 4	3358	C18
1030	D 9	3370	F 7
1111	K19	3371	F23
1320	D14	3372	E24
1330	B20	3374	D24
1352	C19	3377	F24
1982	A23	3379	E24
1990	E28	3380	E25
1µ5	C 4	3384	D24
2001	B 2	3392	B26
2003	F 2	3393	D26
2004	F 2	3394	G26
2005	F 2	3395	G27
2006	F 2	3396	F27
2008	F 3	3397	F27
2009	E 5	3406	F25
2011	H 4	3409	H25
2013	E 6	3410	G25
2021	B 5	3411	G25
2022	D 5	3412	H26
2023	D 4	3416	B25
2032	B 8	3419	C25
2033	B 6	3420	C25
2042	C10	3421	C25
2054	M17	3422	D26
2055	L18	3426	D25
2056	L19	3429	E25
2057	M19	3430	E25
2070	E 8	3431	E25
2114	K20	3432	F26
2115	M21	3440	G24
2116	I 22	3441	G24
2267	L23	3442	G24
2268	L22	3850	L 6
2269	K25	3851	F20
2270	K26	3852	L 6
2271	K24	3853	F21
2272	I 23	3854	L14
2273	L24	3855	F21
2274	K27	3856	K 7
2276	J27	3857	K 6
2277	J27	3858	M12
2278	I 25	3861	M13
2279	L24	3862	M12
2290	J26	3864	J 7
2315	B15	3865	L13
2316	B16	3866	K13
2321	C16	3867	L12
2323	E16	3868	J27
2326	E15	3869	K15
2330	B20	3871	L10
2332	C22	3872	M23
2334	B22	3873	F11
2345	F17	3875	L 9
2346	F17	3876	M10
2348	F18	3877	G11
2349	F 8	3878	F12
2352	B19	3879	N 6
2353	F22	3880	N 6
2354	F22	3881	E12
2355	F22	3882	N 8
2358	C18	3883	L 7
2359	C18	3884	K 6
2360	C18	3886	K 5
2361	E23	3887	M 5
2362	E23	3888	J 5
2363	D23	3912	L15
2369	F 7	5031	D10
2397	G27	5034	A 7
2410	H25	5035	B 6
2420	C25	5115	I 21
2430	F25	5315	B16
2843	L 6	5330	B20
2850	F21	5331	B21
2851	M22	5395	G26
2852	F21	56n	L22
2854	F21	5995	L28
2856	M23	6054	L18
2857	L14	6055	L18
2860	L 5	6057	L20
2876	L10	6272	I 26
2877	E11	6278	I 27
2878	D12	6326	E15
2879	D12	6406	G26
2880	D10	6416	C26
3001	B 3	6426	E26
3009	E 5	6850	G20
3010	E 4	6851	G20
3011	E 4	6852	G21
3012	F 6	6853	G21
3013	E 6	6854	G21
3014	F 6	6855	G21
3015	F 6	6856	G20
3016	B 7	6860	M23
3017	G 4	6869	L15
3023	D 5	7020	C 8
3029	F 9	7054	L18
3030	D10	7056	L20
3031	D 9	7058	L20
3051	L17	7220	I 21
3052	L18	7350	C22
3053	L18	7406	G25
3054	M18	7416	B25
3055	L19	7426	D25
3057	M20	7442	G24
3058	M20	7855	J 6
3070	E 7	7861	M13
3071	E 7	7865	L13
3111	J18	7869	L14
3113	J20	7875	L10
3269	L26	7880	D11
3270	K26	7881	D12
3271	K26	90.3a	M 4
3272	I 23	90.3b	M 5
3273	I 24	BU2	M 4
3274	K27	BU3	M 5
3275	I 27	BU4	N 6
3276	I 27	BU5	J28
3278	L24	BU6	M11
3279	L25		
3315	B15		
3318	C13		
3319	C14		
3320	C14		
3321	C14		
3322	C16		
3324	D15		
3326	E15		
3329	B18		
3330	B19		
3331	B21		
3332	B21		
3333	B22		
3334	C22		
3345	F17		
3348	F18		
3349	F20		
3351	E23		
3353	F21		

DIAGRAM-SCHALTBILD-SCHEMA-DIAGRAM D TXT DECODER - VIDEOTEXT DECODER - D



AGRAM D TXT DECODER – VIDEOTEXT DECODER – DECODIFI



CHASSIS

MECHANICAL PARTS

	4822 492 63524	SPRINC
	4822 492 70158	SPRINC
	4822 256 30274	FUSE H
	4822 277 10976	MAINS
	4822 273 30206	SWITCI
	4822 404 30989	BRACK
	4822 404 30991	BRACK transc.
	4822 276 80347	FOIL KI

BOARD

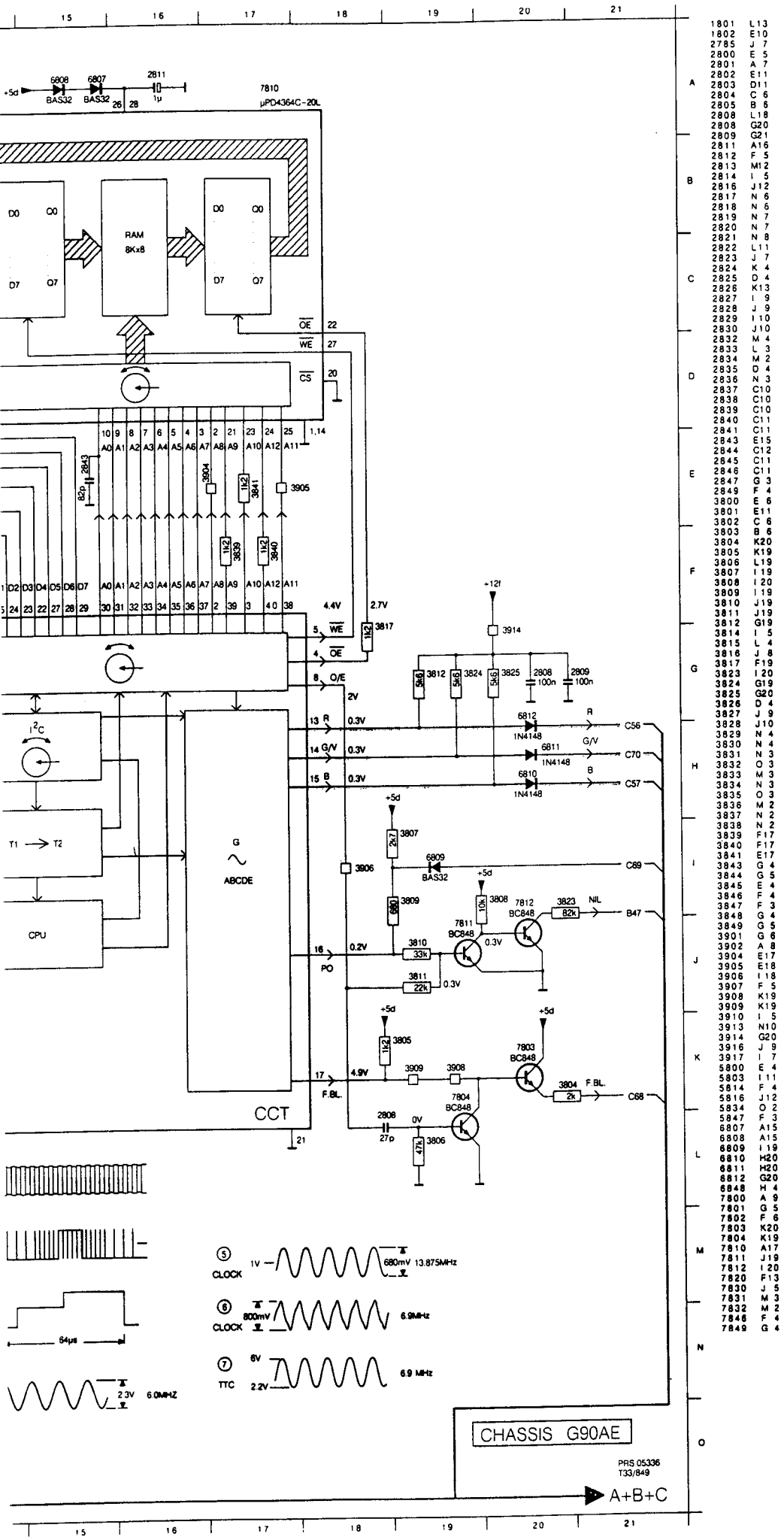
A1	4822 265 40596	2P MAI
A2	4822 265 30389	2P DEC
A3	4822 265 30378	4P
A4	4822 264 40207	3P
A5	4822 265 40421	6P
M1	4822 265 30351	5P
M6	4822 267 50823	7P FOI
M8	4822 417 50217	4P GOL
M9	4822 267 40648	5P GOL
M16	4822 264 40207	3P
	4822 267 31029	CINCH
	4822 267 60188	CVBS/a
	4822 267 60243	EUROC

CABLE

A1	4822 290 60626	2P MAI
A3/L2	4822 267 40597	4P
A4	4822 267 40582	3P
A5	4822 267 40584	6P
M1/L1	4822 267 40583	5P
M16	4822 267 40582	3P

VARIOUS PARTS

1000	4822 210 50118	TUNER
1000	4822 210 40273	TUNER
1003	4822 212 22983	INFRA I
1015	4822 242 71852	FILTER
1015	4822 242 70824	FILTER
1030	4822 153 30025	FILTER
1030	4822 242 72211	FILTER
1111	4822 242 71841	FILTER
1111	4822 242 70714	FILTER
1320	4822 157 53897	FILTER
1330	4822 320 40189	DELAY
1352	4822 242 70626	CRYST.
1500	4822 253 10072	FUSE 2
1530	4822 253 10099	FUSE 1
1600	4822 253 30025	FUSE 2
1640	4822 253 10064	FUSE 4
1760	4822 242 70831	CRYST.
1801	4822 242 71417	CRYST.
1802	4822 242 71622	CRYST.
1843	4822 253 20089	FUSE 6



CHASSIS

MECHANICAL PARTS

	4822 492 63524	SPRING TS7625
	4822 492 70158	SPRING TS7502/7503/7545
	4822 256 30274	FUSE HOLDER
	4822 277 10976	MAINS SWITCH
	4822 273 30206	SWITCH SK11
	4822 404 30989	BRACKET in front of tuner
	4822 404 30991	BRACKET fixing secam/pal transc.
	4822 276 80347	FOIL KEYBOARD

BOARD

A1	4822 265 40596	2P MAINS
A2	4822 265 30389	2P DEGAUSSING
A3	4822 265 30378	4P
A4	4822 264 40207	3P
A5	4822 265 40421	6P
M1	4822 265 30351	5P
M6	4822 267 50823	7P FOIL
M8	4822 417 50217	4P GOLD PLATED
M9	4822 267 40648	5P GOLD PLATED
M16	4822 264 40207	3P
	4822 267 31029	CINCH
	4822 267 60188	CVBS/audio/headphone
	4822 267 60243	EUROCONNECTOR

CABLE

A1	4822 290 60626	2P MAINS
A3/L2	4822 267 40597	4P
A4	4822 267 40582	3P
A5	4822 267 40584	6P
M1/L1	4822 267 40583	5P
M16	4822 267 40582	3P

VARIOUS PARTS

1000	4822 210 50118	TUNER U743/600
1000	4822 210 40273	TUNER UV617
1003	4822 212 22983	INFRA RED RECEIVER
1015	4822 242 71852	FILTER OFWJ1951
1015	4822 242 70824	FILTER OFWG1956
1030	4822 153 30025	FILTER 6,0MHz
1030	4822 242 72211	FILTER 5,5MHz
1111	4822 242 71841	FILTER 6,0MHz
1111	4822 242 70714	FILTER 5,5MHz
1320	4822 157 53897	FILTER 4,43MHz
1330	4822 320 40189	DELAY LINE 64µs
1352	4822 242 70626	CRYSTAL 8,87MHz
1500	4822 253 10072	FUSE 200mA T
1530	4822 253 10099	FUSE 100mA T
1600	4822 253 30025	FUSE 2A T
1640	4822 253 10064	FUSE 400mA T
1760	4822 242 70831	CRYSTAL 4,0MHz
1801	4822 242 71417	CRYSTAL 13,875MHz
1802	4822 242 71622	CRYSTAL 6,0MHz
1843	4822 253 20089	FUSE 630mA T

⊣⊢

2001	4822 124 41569	150µF 20% 16V
2003	4822 124 41546	1µF 20% 16V
2004	4822 124 41546	1µF 20% 16V
2005	4822 124 41546	1µF 20% 16V
2006	4822 124 41546	1µF 20% 16V
2008	4822 121 51356	180nF 10% 63V
2009	4822 124 41596	22µF 20% 50V
2011	4822 122 31644	2,2nF 10% 63V
2013	4822 124 41546	1µF 20% 16V
2021	4822 122 32442	10nF 50V
2022	4822 124 41546	1µF 20% 16V
2023	4822 122 32442	10nF 50V
2032	4822 122 31783	2700pF 10% 50V
2033	4822 122 32863	22nF 80% 50V
2043	4822 122 30043	10nF 80% 100V
2054	4822 122 31797	22nF 10% 63V
2055	5322 122 31647	1nF 10% 50V
2056	4822 122 32862	10nF 80% 50V
2057	4822 121 51356	180nF 10% 63V
2070	4822 124 41569	150µF 20% 16V
2114	4822 122 32863	22nF 80% 50V
2115	4822 122 33104	100nF 10% 63V
2116	4822 122 32082	4,7pF 5% 50V
2267	4822 122 32566	3,9nF 10% 63V
2268	4822 122 32183	56nF 10% 50V
2269	4822 124 41644	470nF 20% 50V
2270	4822 122 33104	100nF 10% 63V
2271	4822 124 20722	1µF 50% 63V
2272	4822 124 41532	4,7µF 20% 50V
2273	4822 122 32862	10nF 80% 50V
2274	5322 121 42578	100nF 5% 100V
2276	4822 122 32862	10nF 80% 50V
2277	4822 124 41387	470µF 20% 25V
2278	4822 122 32863	22nF 80% 50V
2279	4822 124 41506	47µF 20% 16V
2290	4822 124 41387	470µF 20% 25V
2315	4822 122 31765	100pF 5% 50V
2316	4822 122 10167	22nF 30% 25V
2321	4822 122 33104	100nF 10% 63V
2323	4822 122 32863	22nF 80% 50V
2324	4822 124 40248	10µF 20% 63V
2325	4822 122 31797	22nF 10% 63V
2326	4822 124 40804	220µF 20% 63V
2327	4822 122 31797	22nF 10% 63V
2330	4822 122 32862	10nF 80% 50V
2332	4822 122 32482	22pF 5% 63V
2334	4822 122 32862	10nF 80% 50V
2345	4822 124 41585	2,2µF 20% 50V
2346	4822 121 42408	220nF 5% 63V
2348	4822 121 51115	270nF 10% 63V
2349	4822 122 31797	22nF 10% 63V
2352	4822 125 50045	20pF TRIMMER
2353	4822 121 41672	100nF 10% 100V
2354	4822 121 41672	100nF 10% 100V
2355	4822 121 41672	100nF 10% 100V
2358	4822 124 41532	4,7µF 20% 50V
2359	4822 122 33104	100nF 10% 63V
2360	4822 122 33104	100nF 10% 63V
2361	4822 122 31772	47pF 5% 50V
2362	4822 122 31772	47pF 5% 50V
2363	4822 122 31772	47pF 5% 50V
2369	4822 124 22803	330µF 20% 16V
2370	4822 124 41545	220µF 20% 16V
2451	4822 122 32893	100nF 80% 50V
2452	5322 122 31844	330pF 10% 63V

CHASSIS

2455	4822 122 31784	4,7nF 10% 50V
2456	4822 124 40248	10µF 20% 63V
2458	4822 121 42937	2,7nF 1% 250V
2459	4822 122 33104	100nF 10% 63V
2464	4822 122 32862	10nF 80% 50V
2465	4822 124 41545	220µF 20% 16V
2466	4822 124 20726	4,7µF 50% 63V
2467	4822 122 33104	100nF 10% 63V
2468	4822 124 20722	1µF 50% 63V
2469	4822 124 20698	22µF 50% 25V
2470	4822 122 31772	47pF 5% 50V
2471	5322 121 42661	330nF 5% 63V
2473	4822 121 40434	330nF 10% 100V
2475	5322 122 31848	33nF 10% 63V
2500	4822 122 31169	1,5nF 10% 500V
2503	5322 122 32779	3,9nF 10% 100V
2505	5322 121 42489	33nF 5% 100V
2506	4822 124 40248	10µF 20% 63V
2509	4822 124 40761	220µF 100V
2526	4822 122 33104	100nF 10% 63V
2531	4822 122 32482	22pF 5% 63V
2534	4822 124 21208	4,7µF 20% 50V
2540	5322 122 31844	330pF 10% 63V
2542	4822 122 40112	560pF 20% 500V
2544	4822 121 51425	180nF 10% 100V
2545	4822 122 32771	1,5nF 10% BN 2kV
2546	5322 121 42523	8,2nF 5% 2kV
2547	4822 121 43137	39nF 10% 250V
2550	4822 121 42917	470nF 5% 200V
2560	4822 121 51385	33nF 20% 100V
2570	4822 124 41696	22µF 20% 250V
2580	4822 124 40198	470µF 20% 16V
2600	4822 124 41531	470nF 10% 250V
2602	4822 122 32769	2,2nF 1kV
2604	4822 122 32769	2,2nF 1kV
2605	4822 124 41599	68µF 20% 385V
2606	4822 122 33856	68pF 20% 400V
2611	4822 122 31766	120pF 5% 50V
2614	4822 122 31767	150pF 5% 50V
2617	5322 121 42498	680nF 5% 63V
2620	4822 122 32891	68nF 20% 50V
2625	4822 122 33825	2,2nF 10% 1kV
2630	4822 124 41056	47µF 50% 200V
2631	4822 124 41056	47µF 50% 200V
2632	4822 122 32585	470pF 10% 500V
2634	4822 122 33824	2,2nF 10% 1kV
2636	4822 121 41854	150nF 5% 63V
2640	4822 124 41677	680µF 20% 25V
2644	5322 122 32711	2,2nF 10% 500V
2645	4822 124 41532	4,7µF 20% 50V
2650	4822 121 42786	33 nF 2% 100V
2655	4822 122 31797	22nF 10% 63V
2656	4822 122 31727	470pF 5% 63V
2660	4822 122 31218	120pF 10% 500V
2661	4822 124 41596	22µF 20% 50V
2670	4822 122 31218	120pF 10% 500V
2700	5322 121 42492	100nF 10% 63V
2702	4822 122 31971	10pF 10% 50V
2704	4822 122 31974	820pF 10% 50V
2705	4822 124 41546	1µF 20% 16V
2709	4822 124 41546	1µF 20% 16V
2714	4822 124 41546	1µF 20% 16V
2721	4822 122 31974	820pF 10% 50V
2722	4822 122 31974	820pF 10% 50V
2723	4822 122 31974	820pF 10% 50V
2724	4822 122 31974	820pF 10% 50V
2725	4822 122 31974	820pF 10% 50V
2726	4822 122 31974	820pF 10% 50V
2730	4822 122 31765	100pF 5% 50V
2731	4822 122 31765	100pF 5% 50V
2753	4822 122 32808	1,2nF 10% 50V
2758	4822 122 31971	10pF 10% 50V
2759	4822 122 32863	22nF 80% 50V
2760	4822 122 31825	27pF 10% 50V
2761	4822 122 31825	27pF 10% 50V
2762	4822 124 41584	100µF 20% 10V
2770	4822 122 31781	1500pF 10% 50V
2778	5322 121 42661	330nF 5% 63V
2780	5322 121 42661	330nF 5% 63V
2790	4822 122 32863	22nF 80% 50V
2800	4822 124 41584	100µF 20% 10V
2801	4822 122 32862	10nF 80% 50V
2802	4822 122 32444	33pF 5% 50V
2803	4822 122 32444	33pF 5% 50V
2804	4822 122 31766	120pF 5% 50V
2805	4822 122 31766	120pF 5% 50V
2806	4822 122 32893	100nF 80% 50V
2808	4822 122 31825	27pF 10% 50V
2809	4822 122 32893	100nF 80% 50V
2811	4822 124 41546	1µF 20% 16V
2812	4822 122 32893	100nF 80% 50V
2813	4822 122 32862	10nF 80% 50V
2814	4822 122 31773	560pF 5% 50V
2815	4822 122 32893	100nF 80% 50V
2816	4822 122 32564	27pF 50V
2817	4822 122 32504	15pF 5% 50V
2818	5322 122 31647	1nF 10% 50V
2819	4822 122 31727	470pF 5% 63V
2820	4822 122 31797	22nF 10% 63V
2821	4822 122 32142	270pF 5% 63V
2822	4822 122 31765	100pF 5% 50V
2823	4822 122 31965	220pF 5% 63V
2824	4822 122 32891	68nF 20% 50V
2825	4822 124 41568	100µF 20% 16V
2826	4822 122 32504	15pF 5% 50V
2827	4822 122 32542	47nF 10% 50V
2828	4822 122 32542	47nF 10% 50V
2829	4822 124 41506	47µF 20% 16V
2830	4822 122 32542	47nF 10% 50V
2832	4822 124 41585	2,2µF 20% 50V
2833	4822 124 41585	2,2µF 20% 50V
2834	4822 124 41626	10µF 20% 16V
2835	4822 122 32893	100nF 80% 50V
2836	4822 122 31766	120pF 5% 50V
2837	4822 122 31839	82pF 10% 50V
2838	4822 122 31839	82pF 10% 50V
2839	4822 122 31839	82pF 10% 50V
2840	4822 122 31839	82pF 10% 50V
2841	4822 122 31839	82pF 10% 50V
2842	4822 122 31839	82pF 10% 50V
2843	4822 124 41545	220µF 20% 16V
2844	4822 122 31839	82pF 10% 50V
2845	4822 122 31839	82pF 10% 50V
2846	4822 122 31839	82pF 10% 50V
2847	4822 124 41584	100µF 20% 10V
2849	4822 124 41629	15µF 20% 50V
2850	4822 122 10167	22nF 30% 25V
2851	4822 124 20722	1µF 50% 63V
2852	4822 122 10167	22nF 30% 25V
2853	4822 122 31784	4,7nF 10% 50V

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2854	4822 122 10167	22nF 30% 25V
2856	4822 124 41546	1µF 20% 16V
2857	4822 122 32139	12pF 5% 63V
2860	4822 122 31784	4,7nF 10% 50V
2876	4822 124 40248	10µF 20% 63V
2877	4822 124 40248	10µF 20% 63V
2878	4822 122 32863	22nF 80% 50V
2879	4822 124 41596	22µF 20% 50V
2880	4822 124 40248	10µF 20% 63V
2883	4822 122 31974	820pF 10% 50V

3001	4822 111 30513	15Ω 5% 0,33W
3003	4822 111 90248	2k2 2% 0,125W
3004	4822 111 90248	2k2 2% 0,125W
3005	4822 111 90248	2k2 2% 0,125W
3006	4822 111 90248	2k2 2% 0,125W
3009	5322 111 90242	180Ω 2% 0,125W
3010	4822 111 90512	24k 2% 0,125W
3011	5322 111 90118	8k2 2% 0,125W
3012	4822 100 11483	10k POTENTIOMETER
3013	5322 111 90108	39k 2% 0,125W
3014	5322 111 90092	1k 2% 0,125W
3015	5322 111 90111	4k7 2% 0,125W
3016	4822 111 90163	jumper
3017	4822 111 90163	jumper
3023	4822 111 90162	680Ω 2% 0,125W
3029	4822 111 90163	jumper
3030	4822 111 90248	2k2 2% 0,125W
3031	4822 111 90348	200Ω 2% 0,125W
3051	4822 111 90249	10k 2% 0,125W
3052	4822 111 90249	10k 2% 0,125W
3053	4822 111 90572	5k6 2% 0,125W
3054	5322 111 90092	1k 2% 0,125W
3055	4822 111 90214	100k 2% 0,125W
3057	4822 111 90543	47k 2% 0,125W
3058	4822 116 52283	4k7 5% 0,5W
3070	4822 111 30513	15Ω 5% 0,33W
3071	4822 111 90163	jumper
3085	5322 111 90092	1k 2% 0,125W
3086	4822 111 90543	47k 2% 0,125W
3087	5322 111 90111	4k7 2% 0,125W
3088	5322 111 90111	4k7 2% 0,125W
3090	4822 111 90185	2M2 5% 0,125W
3091	4822 111 90214	100k 2% 0,125W
3092	4822 111 90205	820k 2% 0,125W
3093	4822 111 90169	560k 2% 0,125W
3094	4822 111 90249	10k 2% 0,125W
3111	4822 116 52428	560Ω 5% 0,5W
3113	5322 111 90113	560Ω 2% 0,125W
3269	5322 111 90138	390Ω 2% 0,125W
3270	4822 111 90196	15k 2% 0,125W
3271	4822 111 90196	15k 2% 0,125W
3272	4822 111 90302	270k 2% 0,125W
3273	4822 111 90163	jumper
3274	5322 111 90104	2Ω2 5% 0,125W
3275	4822 116 52183	16Ω 5% 0,5W
3276	4822 116 52183	16Ω 5% 0,5W
3278	4822 111 90151	1k5 2% 0,125W
3279	4822 111 90238	18k 2% 0,125W
3315	4822 116 52253	2k 5% 0,5W
3318	4822 111 90163	jumper
3319	4822 111 90163	jumper

3320	5322 111 90096	1k2 2% 0,125W
3321	5322 111 90113	560Ω 2% 0,125W
3322	4822 111 90366	620Ω 2% 0,125W
3324	4822 111 90163	jumper
3326	4822 116 52296	6k8 5% 0,5W
3329	4822 111 90163	jumper
3330	5322 111 90138	390Ω 2% 0,125W
3331	5322 111 90106	330Ω 2% 0,125W
3332	5322 111 90106	330Ω 2% 0,125W
3333	5322 111 90096	1k2 2% 0,125W
3334	4822 100 11481	1k POTENTIOMETER
3345	4822 116 52204	1k 5% 0,5W
3348	4822 111 90358	360Ω 2% 0,125W
3349	5322 111 90092	1k 2% 0,125W
3351	4822 111 90163	jumper
3353	4822 116 90533	360Ω 1% 0,125W
3354	4822 116 90533	360Ω 1% 0,125W
3355	4822 116 90533	360Ω 1% 0,125W
3358	4822 111 90178	220Ω 2% 0,125W
3370	4822 111 30508	10Ω 5% 0,33W
3450	4822 111 90163	jumper
3451	4822 116 52249	1k8 5% 0,5W
3452	4822 111 90151	1k5 2% 0,125W
3453	5322 111 90091	100Ω 2% 0,125W
3454	5322 111 90113	560Ω 2% 0,125W
3455	5322 111 90111	4k7 2% 0,125W
3456	4822 116 52296	6k8 5% 0,5W
3457	4822 100 11483	10k POTENTIOMETER
3458	4822 116 52853	30K 1% 0,6W
3459	4822 116 81159	3M 5% 0,5W
3460	4822 111 90349	20k 2% 0,125W
3461	4822 101 10963	47k POTENTIOMETER
3462	5322 111 90267	33k 2% 0,125W
3463	4822 111 90196	15k 2% 0,125W
3465	4822 116 52204	1k 5% 0,5W
3466	4822 111 90151	1k5 2% 0,125W
3468	4822 111 90544	6k8 2% 0,125W
3469	4822 111 90186	22Ω 2% 0,125W
3470	4822 116 52269	3k3 5% 0,5W
3471	4822 111 90197	220k 2% 0,125W
3473	4822 111 90302	270k 2% 0,125W
3475	4822 111 90151	1k5 2% 0,125W
3481	4822 111 90163	jumper
3500	5322 111 90091	100Ω 2% 0,125W
3501	4822 116 52222	390Ω 5% 0,5W
3502	4822 116 80842	18k 5% 2W
3503	4822 116 51789	22Ω 5% 0,5W
3504	5322 111 90092	1k 2% 0,125W
3505	5322 116 54748	1k2 5% 1,6W
3506	4822 111 90569	2k7 2% 0,125W
3507	4822 116 51789	22Ω 5% 0,5W
3508	4822 116 52261	24k 5% 0,5W
3509	4822 111 90349	20k 2% 0,125W
3510	4822 101 10818	100Ω POTENTIOMETER
3511	4822 116 81155	3Ω9 5% 0,5W
3512	4822 111 90253	12k 2% 0,125W
3513	4822 111 90348	200Ω 2% 0,125W
3515	4822 111 90571	3k9 2% 0,125W
3516	4822 111 90544	6k8 2% 0,125W
3518	4822 111 90253	12k 2% 0,125W
3520	4822 116 52234	100k 5% 0,5W
3525	4822 100 11482	6k8 30% 0,1W
3527	4822 111 90251	22k 2% 0,125W
3534	4822 111 30506	8Ω2 5% 0,33W
3535	4822 111 90162	680Ω 2% 0,125W

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3540	4822 116 52199	68Ω 5% 0,5W
3541	4822 111 90544	6k8 2% 0,125W
3542	4822 111 90572	5k6 2% 0,125W
3544	4822 116 81158	5k6 5% 2W
3545	4822 111 90203	68Ω 2% 0,125W
3554	4822 116 80342	1k 5% 0,5W
3555	4822 116 52251	18k 5% 0,5W
3556	4822 116 53717	430k 5% 0,25W
3557	4822 111 90163	jumper
3560	4822 116 52458	15k 5% 0,5W
3561	4822 116 52472	47k 5% 0,5W
3570	4822 111 30506	8Ω2 5% 0,33W
3580	4822 111 30483	1Ω 5% 0,33W
3581	4822 111 30483	1Ω 5% 0,33W
3582	4822 116 81154	2Ω2 5% 0,5W
3601	4822 116 40137	
3604	4822 110 42214	10M 5% 0,5W
3609	4822 116 52464	24k 5% 0,5W
3610	4822 116 81178	24k 5% 2W
3611	5322 111 90111	4k7 2% 0,125W
3613	4822 111 90214	100k 2% 0,125W
3614	4822 116 52275	360k 5% 0,5W
3615	5322 111 90109	470Ω 2% 0,125W
3616	5322 111 90091	100Ω 2% 0,125W
3617	4822 116 81157	220Ω 5% 2W
3618	4822 111 90565	180k 2% 0,125W
3619	4822 111 90163	jumper
3620	4822 111 90565	180k 2% 0,125W
3621	4822 116 81156	220Ω 5% 2W
3622	4822 116 81156	220Ω 5% 2W
3623	4822 111 90357	33Ω 2% 0,125W
3625	4822 116 81179	36Ω 5% 2W
3627	4822 116 81179	36Ω 5% 2W
3632	4822 111 90196	15k 2% 0,125W
3633	4822 111 90238	18k 2% 0,125W
3634	4822 111 90165	2k 2% 0,125W
3635	4822 100 11481	1k 30% 0,1W
3636	5322 111 90109	470Ω 2% 0,125W
3640	4822 111 90163	jumper
3644	4822 111 30483	1Ω 5% 0,33W
3645	4822 111 90163	jumper
3647	4822 116 52764	1k5 1% 0,4W
3649	4822 111 90357	33Ω 2% 0,125W
3650	5322 111 90265	1k6 2% 0,125W
3651	4822 111 90163	jumper
3652	5322 111 90091	100Ω 2% 0,125W
3653	5322 111 90306	750Ω 2% 0,125W
3654	4822 111 90163	jumper
3655	5322 111 90091	100Ω 2% 0,125W
3656	4822 111 90162	680Ω 2% 0,125W
3657	4822 116 81003	220Ω 5% 2W
3658	5322 111 90091	100Ω 2% 0,125W
3659	5322 111 90111	4k7 2% 0,125W
3660	5322 111 90091	100Ω 2% 0,125W
3661	4822 116 52219	330Ω 5% 0,5W
3662	4822 111 90154	270Ω 2% 0,125W
3663	4822 111 90163	jumper
3664	4822 111 30506	8Ω2 5% 0,33W
3665	4822 111 90249	10k 2% 0,125W
3666	4822 111 90238	18k 2% 0,125W
3667	5322 111 90098	150Ω 2% 0,125W
3668	5322 111 90098	150Ω 2% 0,125W
3669	4822 111 90178	220Ω 2% 0,125W
3670	4822 111 90196	15k 2% 0,125W
3671	5322 111 90109	470Ω 2% 0,125W
3672	5322 111 90111	4k7 2% 0,125W
3673	5322 111 90092	1k 2% 0,125W
3681	4822 111 90163	jumper
3700	4822 116 52233	10k 5% 0,5W
3701	5322 111 90111	4k7 2% 0,125W
3703	4822 111 90163	jumper
3705	4822 111 90571	3k9 2% 0,125W
3706	4822 111 90253	12k 2% 0,125W
3707	4822 116 52204	1k 5% 0,5W
3708	4822 111 90544	6k8 2% 0,125W
3709	4822 111 90569	2k7 2% 0,125W
3710	4822 111 90509	13k 2% 0,125W
3711	4822 116 52249	1k8 5% 0,5W
3712	5322 111 90118	8k2 2% 0,125W
3713	4822 116 52283	4k7 5% 0,5W
3714	4822 111 90198	3k 2% 0,125W
3715	4822 111 90196	15k 2% 0,125W
3716	4822 116 52259	2k4 5% 0,5W
3717	4822 111 90249	10k 2% 0,125W
3724	4822 111 90163	jumper
3730	4822 111 90156	300Ω 2% 0,125W
3731	4822 116 52304	82k 5% 0,5W
3732	4822 116 52263	2k7 5% 0,5W
3733	5322 111 90092	1k 2% 0,125W
3735	4822 116 52204	1k 5% 0,5W
3742	4822 116 52249	1k8 5% 0,5W
3743	4822 111 90163	jumper
3750	4822 111 90163	jumper
3753	4822 111 90253	12k 2% 0,125W
3756	4822 111 90575	82k 2% 0,125W
3757	4822 111 90171	820Ω 2% 0,125W
3758	4822 111 90163	jumper
3759	4822 111 90163	jumper
3760	4822 111 90249	10k 2% 0,125W
3762	4822 111 90163	jumper
3763	4822 111 90163	jumper
3764	4822 111 90163	jumper
3765	4822 111 90163	jumper
3766	5322 111 90111	4k7 2% 0,125W
3767	4822 111 90249	10k 2% 0,125W
3768	5322 111 90111	4k7 2% 0,125W
3769	5322 111 90111	4k7 2% 0,125W
3770	4822 116 52283	4k7 5% 0,5W
3771	4822 111 90512	24k 2% 0,125W
3772	4822 111 90157	3k3 2% 0,125W
3773	4822 116 52283	4k7 5% 0,5W
3774	4822 116 52283	4k7 5% 0,5W
3775	4822 111 90249	10k 2% 0,125W
3776	4822 111 90197	220k 2% 0,125W
3777	4822 111 90157	3k3 2% 0,125W
3778	4822 111 90196	15k 2% 0,125W
3779	4822 111 90249	10k 2% 0,125W
3780	4822 111 90249	10k 2% 0,125W
3782	4822 111 90362	430Ω 2% 0,125W
3783	4822 111 90163	jumper
3785	4822 111 90163	jumper
3790	4822 111 90163	jumper
3791	5322 111 90096	1k2 2% 0,125W
3792	4822 111 90163	jumper
3793	4822 111 90157	3k3 2% 0,125W
3794	4822 111 90157	3k3 2% 0,125W
3800	4822 111 90249	10k 2% 0,125W
3801	5322 111 90094	1M 5% 0,125W
3802	5322 111 90091	100Ω 2% 0,125W
3803	5322 111 90091	100Ω 2% 0,125W

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3804	4822 116 52253	2k 5% 0,5W
3805	5322 111 90096	1k2 2% 0,125W
3806	4822 111 90543	47k 2% 0,125W
3807	4822 111 90569	2k7 2% 0,125W
3808	4822 111 90249	10k 2% 0,125W
3809	4822 111 90162	680Ω 2% 0,125W
3810	5322 111 90267	33k 2% 0,125W
3811	4822 111 90251	22k 2% 0,125W
3812	4822 116 90534	5k6 1% 0,5W
3814	4822 116 52204	1k 5% 0,5W
3815	4822 111 90151	1k5 2% 0,125W
3816	4822 111 90202	68k 2% 0,125W
3817	5322 111 90096	1k2 2% 0,125W
3823	4822 111 90575	82k 2% 0,125W
3824	4822 116 90534	5k6 1% 0,5W
3825	4822 116 90534	5k6 1% 0,5W
3826	4822 111 30494	2Ω7 5% 0,33W
3827	4822 111 90157	3k3 2% 0,125W
3828	4822 111 90124	82Ω 2% 0,125W
3829	5322 111 90098	150Ω 2% 0,125W
3830	4822 111 90371	75Ω 2% 0,125W
3831	4822 111 90162	680Ω 2% 0,125W
3832	5322 111 90092	1k 2% 0,125W
3833	5322 111 90092	1k 2% 0,125W
3834	4822 111 90162	680Ω 2% 0,125W
3835	5322 111 90113	560Ω 2% 0,125W
3836	4822 111 90543	47k 2% 0,125W
3837	5322 111 90092	1k 2% 0,125W
3838	4822 111 90251	22k 2% 0,125W
3839	5322 111 90096	1k2 2% 0,125W
3840	5322 111 90096	1k2 2% 0,125W
3841	5322 111 90096	1k2 2% 0,125W
3843	5322 111 90091	100Ω 2% 0,125W
3844	4822 111 90157	3k3 2% 0,125W
3845	4822 111 30526	47Ω 5% 0,33W
3846	4822 111 30526	47Ω 5% 0,33W
3847	4822 111 90178	220Ω 2% 0,125W
3848	5322 111 90113	560Ω 2% 0,125W
3849	5322 111 90092	1k 2% 0,125W
3850	4822 111 90545	6k2 2% 0,125W
3851	4822 116 80747	75Ω 5% 0,125W
3852	4822 111 90545	6k2 2% 0,125W
3853	4822 116 80747	75Ω 5% 0,125W
3854	4822 111 90249	10k 2% 0,125W
3855	4822 116 80747	75Ω 5% 0,125W
3856	4822 111 90214	100k 2% 0,125W
3857	4822 111 90251	22k 2% 0,125W
3858	4822 116 80747	75Ω 5% 0,125W
3859	5322 111 90099	150k 2% 0,125W
3860	5322 111 90099	150k 2% 0,125W
3861	5322 111 90111	4k7 2% 0,125W
3862	5322 111 90092	1k 2% 0,125W
3863	4822 111 90249	10k 2% 0,125W
3864	4822 111 90249	10k 2% 0,125W
3865	4822 111 90249	10k 2% 0,125W
3866	4822 111 90249	10k 2% 0,125W
3867	4822 116 52233	10k 5% 0,5W
3868	4822 111 90124	82Ω 2% 0,125W
3869	4822 111 90165	2k 2% 0,125W
3871	4822 116 52215	220Ω 5% 0,5W
3872	4822 111 90545	6k2 2% 0,125W
3873	5322 111 90091	100Ω 2% 0,125W
3875	4822 111 90203	68Ω 2% 0,125W
3876	4822 111 90157	3k3 2% 0,125W
3877	4822 116 80747	75Ω 5% 0,125W

3878	4822 111 90249	10k 2% 0,125W
3879	4822 111 90163	jumper
3880	4822 111 90163	jumper
3881	5322 111 90092	1k 2% 0,125W
3882	4822 111 90163	jumper
3883	5322 111 90092	1k 2% 0,125W
3884	4822 111 90163	jumper
3885	4822 111 90163	jumper
3886	4822 111 90163	jumper
3887	4822 111 90163	jumper
3888	4822 111 90163	jumper
3889	4822 111 90163	jumper
3901	4822 111 90163	jumper
3902	4822 111 90163	jumper
3904	4822 111 90163	jumper
3905	4822 111 90163	jumper
3906	4822 111 90163	jumper
3907	4822 111 90163	jumper
3908	4822 111 90163	jumper
3909	4822 111 90163	jumper
3910	4822 111 90163	jumper
3912	4822 111 90163	jumper
3913	4822 111 90163	jumper
3914	4822 111 90163	jumper
3916	4822 111 90163	jumper
3917	4822 111 90163	jumper

5020	4822 157 53892	1,5µH
5030	4822 158 10604	6,8µH
5031	4822 157 53918	12µH
5034	4822 157 53921	0,2µH
5035	4822 157 53919	0,24µH
5115	4822 157 52809	12µH
5315	4822 157 53939	10µH
5330	4822 157 52808	10µH
5331	4822 157 53063	47µF
5452	4822 157 53123	100µH
5530	4822 157 53895	390µH
5534	4822 157 52315	
5540	4822 157 53553	0,33µH
5541	4822 146 21116	TRANSFORMER DRIVER
5545	4822 140 10306	LINE TRANSFORMER
5554	4822 156 21332	LINEARITY COIL
5580	4822 158 10563	82µH
5600	4822 212 22978	MAINS FILTER
5619	4822 157 53894	5,6µH
5621	4822 157 53896	220µH
5625	4822 146 21399	S.O.P.S. TRANSFORMER
5631	4822 158 10551	27µH
5632	4822 157 53893	3,3µH
5633	4822 157 53893	3,3µH
5634	4822 157 53542	1µH
5701	4822 157 52843	56µH
5790	4822 157 53139	4,7µH
5800	4822 157 53939	10µH
5803	4822 157 53963	RESONATOR 6,5MHz
5814	4822 157 53939	10µH
5816	4822 157 53066	15µH
5834	4822 157 53891	27µH
5847	4822 157 53893	3,3µH
5857	4822 157 53123	100µH

6054	4822 130 80446	BAS32
6055	4822 130 80446	BAS32
6057	4822 130 80446	BAS32
6272	4822 130 80446	BAS32
6278	4822 130 80446	BAS32
6326	4822 130 30621	1N4148
6455	4822 130 81227	BZV55-F5V6
6465	4822 130 80446	BAS32
6520	4822 130 80877	BAV103
6521	4822 130 80877	BAV103
6522	4822 130 80877	BAV103
6546	4822 130 32896	BYD33M
6547	4822 130 42489	BYD33G
6560	4822 130 61222	BYW95C/20
6570	4822 130 42606	BYD33J
6580	4822 130 42489	BYD33G
6602	4822 130 33887	GP15J-16
6603	4822 130 33887	GP15J-16
6604	4822 130 33887	GP15J-16
6605	4822 130 33887	GP15J-16
6611	4822 130 80446	BAS32
6613	4822 130 80446	BAS32
6614	4822 130 80446	BAS32
6615	4822 130 80446	BAS32
6616	4822 130 80886	BZV55-F22
6617	5322 130 32962	BZV85-C6V2
6621	4822 130 42488	BYD33D
6622	4822 130 80446	BAS32
6623	4822 130 80446	BAS32
6624	4822 130 80446	BAS32
6630	4822 130 61222	BYW95C/20
6637	4822 130 34167	BZX79-F6V2
6640	4822 130 42488	BYD33D
6645	4822 130 42488	BYD33D
6649	4822 130 80446	BAS32
6653	4822 130 80446	BAS32
6655	4822 130 81253	BZV55-F15
6657	4822 130 81226	BZV55-F33
6658	4822 130 81226	BZV55-F33
6659	4822 130 81226	BZV55-F33
6660	4822 130 42488	BYD33D
6661	4822 130 34441	BZX79-F22
6662	4822 130 80905	BZV55-F5V1
6665	4822 130 81252	BZV55-F4V7
6669	4822 130 80446	BAS32
6670	4822 130 20245	SFOR5D43
6724	4822 130 80446	BAS32
6726	4822 130 80446	BAS32
6727	4822 130 80446	BAS32
6730	4822 130 80446	BAS32
6733	4822 130 80446	BAS32
6741	4822 130 80446	BAS32
6742	4822 209 72895	TLUV5300
6770	4822 130 30959	ZTK33B
6807	4822 130 80446	BAS32
6808	4822 130 80446	BAS32
6809	4822 130 80446	BAS32
6810	4822 130 30621	1N4148
6811	4822 130 30621	1N4148
6812	4822 130 30621	1N4148
6843	4822 130 42488	BYD33D
6848	4822 130 80905	BZV55-F5V1
6850	4822 130 80446	BAS32
6851	4822 130 80446	BAS32
6852	4822 130 80446	BAS32
6853	4822 130 80446	BAS32
6854	4822 130 80446	BAS32
6855	4822 130 80446	BAS32
6856	4822 130 80446	BAS32
6860	4822 130 80446	BAS32
6869	4822 130 80446	BAS32

7020	4822 209 72746	TDA8341/N4
7054	5322 130 41982	BC848B
7056	5322 130 41983	BC858B
7058	5322 130 42012	BC858
7087	4822 130 42705	BC847
7088	4822 130 61207	BC848
7220	4822 209 60103	TDA8191
7350	4822 209 71518	TDA3561A/N8
7455	5322 130 42012	BC858
7470	4822 209 72363	TDA2579/N6
7471	5322 130 42136	BC848C
7502	4822 130 42681	BD939F
7503	4822 130 42681	BD939F
7530	5322 130 42136	BC848C
7533	4822 130 44283	BC636
7540	4822 130 41782	BF422
7545	4822 130 42679	BUT11AF
7612	5322 130 42136	BC848C
7614	4822 130 80891	CNX83
7615	4822 130 42513	BC858C
7616	5322 130 44349	BC635
7625	4822 130 42679	BUT11AF
7637	5322 130 42136	BC848C
7652	4822 130 42231	BC557C
7653	5322 130 42012	BC858A
7654	5322 130 42755	BC847C
7655	4822 130 42705	BC847
7656	4822 130 61233	BC857
7661	4822 130 40823	BD135
7663	5322 130 42012	BC858
7671	4822 130 61207	BC848
7720	4822 209 60104	TMP47C434N-3555
7730	4822 130 61207	BC848
7754	4822 130 61207	BC848
7757	4822 130 61207	BC848
7767	4822 130 61207	BC848
7770	4822 209 73313	X2402
7776	4822 209 73852	PMBT2369
7790	4822 209 10892	LA7910
7800	4822 209 72355	MAB8461P/W107
7801	4822 130 61207	BC848
7802	4822 130 61207	BC848
7803	4822 130 61207	BC848
7804	4822 130 61207	BC848
7810	4822 209 72359	UPD4364C-20L
7811	4822 130 61207	BC848
7812	4822 130 61207	BC848
7820	4822 209 73879	SAA5243P/E
7830	4822 209 72972	SAA5231/V6
7831	4822 130 60513	BC859
7832	5322 130 41982	BC848B
7846	5322 130 44921	BD943
7849	5322 130 42012	BC858
7855	4822 130 61207	BC848
7858	5322 130 41982	BC848B
7861	4822 130 61207	BC848
7865	5322 130 42012	BC858
7869	4822 209 73852	PMBT2369
7875	4822 130 61207	BC848
7880	4822 209 83119	TDA5850
7881	4822 130 61207	BC848

CRT PANEL

L1	4822 265 30351	5P
L2	4822 265 30378	4P
	4822 267 30778	PICTURE TUBE SOCKET

2397	5322 121 41763	33nF 10% 630V
2410	5322 122 31844	330pF 10% 63V
2420	5322 122 31844	330pF 10% 63V
2430	5322 122 31844	330pF 10% 63V

3371	4822 111 90157	3k3 2% 0,125W
3372	4822 111 90157	3k3 2% 0,125W
3374	4822 111 90157	3k3 2% 0,125W
3377	4822 111 90151	1k5 2% 0,125W
3379	5322 111 90113	560Ω 2% 0,125W
3380	4822 100 20149	2k2 POTENTIOMETER
3384	4822 100 20149	2k2 POTENTIOMETER
3392	4822 116 52399	1k5 5% 0,5W
3393	4822 116 52399	1k5 5% 0,5W
3394	4822 116 52399	1k5 5% 0,5W
3395	4822 111 30483	1Ω 5% 0,33W
3396	4822 116 52399	1k5 5% 0,5W
3397	4822 116 52399	1k5 5% 0,5W
3406	4822 116 81019	12k 5% 2W
3409	4822 111 90366	620Ω 2% 0,125W
3410	4822 111 90186	22Ω 2% 0,125W
3411	4822 111 90336	1k1 2% 0,125W
3412	4822 100 20148	1k POTENTIOMETER
3416	4822 116 81019	12k 5% 2W
3419	4822 111 90366	620Ω 2% 0,125W

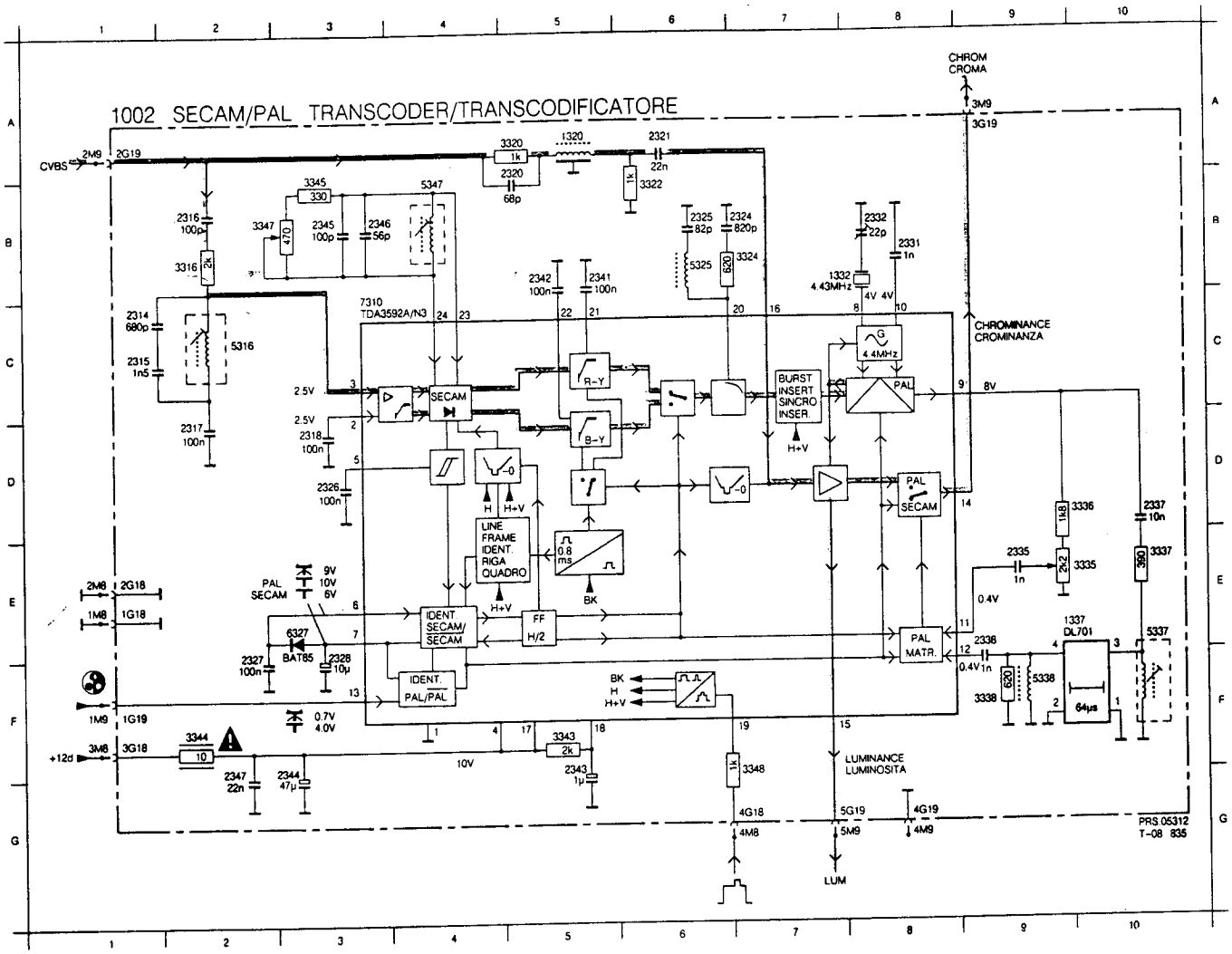
3420	4822 111 90186	22Ω 2% 0,125W
3421	4822 111 90336	1k1 2% 0,125W
3422	4822 100 20148	1k POTENTIOMETER
3426	4822 116 81019	12k 5% 2W
3429	4822 111 90366	620Ω 2% 0,125W
3430	4822 111 90186	22Ω 2% 0,125W
3431	4822 111 90336	1k1 2% 0,125W
3432	4822 100 20148	1k POTENTIOMETER
3440	4822 111 90167	4k3 2% 0,125W
3441	4822 111 90336	1k1 2% 0,125W
3442	5322 111 90092	1k 2% 0,125W

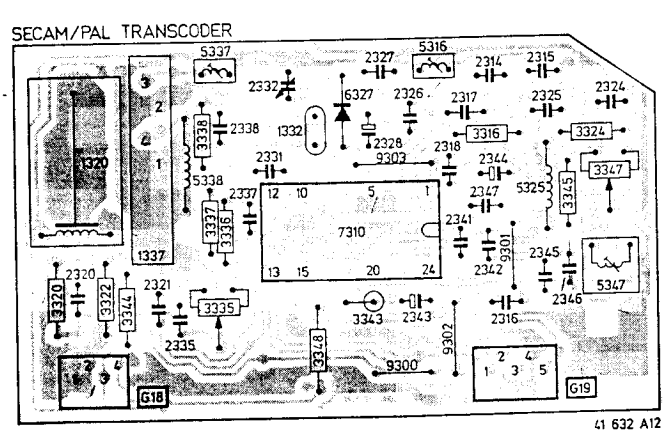
5395	4822 157 52368	15µH

6406	4822 130 80446	BAS32
6416	4822 130 80446	BAS32
6426	4822 130 80446	BAS32

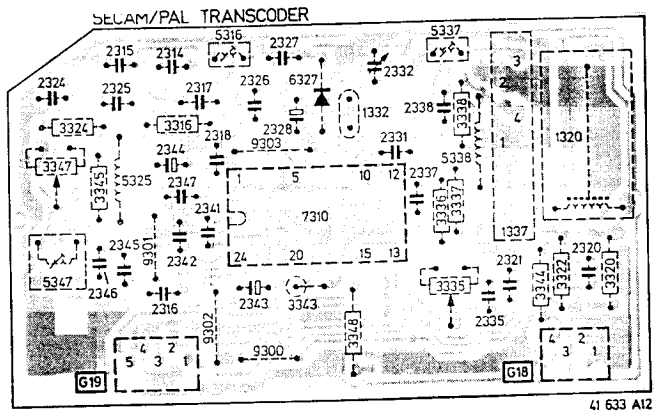
7406	4822 130 41782	BF422
7416	4822 130 41782	BF422
7426	4822 130 41782	BF422
7442	5322 130 42012	BC858

1320	A 5	2315	C 1	2320	A 5	2326	D 3	2332	B 8	2341	B 5	2345	B 3	3320	A 5	3336	D10	3344	F 2	5316	C 2	5347	B 4
1332	B 7	2316	B 2	2321	A 6	2327	E 2	2335	E 9	2342	B 5	2346	B 3	3322	B 6	3337	E10	3345	B 3	5325	B 6	6327	E 3
1337	E10	2317	D 2	2324	B 7	2328	E 3	2337	D10	2343	F 5	2347	F 2	3324	B 7	3338	F 9	3347	B 2	5337	E10	7310	C 3
2314	C 1	2318	D 3	2325	B 6	2331	B 8	2338	E 9	2344	F 3	3316	B 2	3335	E10	3343	F 5	3348	F 7	5338	F 9		





41 632 A12



41 633 A12

SECAM/PAL TRANSCODER

BOARD

G18	4822 266 30276	4P GOLD PLATED
G19	4822 265 40503	5P GOLD PLATED

VARIOUS PARTS

1320	4822 157 53047	DELAY COIL
1332	4822 242 70323	CRYSTAL 4,43MHz
1337	4822 320 40096	DELAY LINE 64µs

2314	4822 121 42995	680pF 5% 100V
2315	4822 121 42994	1,5µF 5% 100V
2316	4822 122 31316	100pF 2% 100V
2317	5322 121 42386	100nF 5% 63V
2318	5322 121 42386	100nF 5% 63V
2320	5322 122 32072	33pF 2%
2321	4822 122 30103	22nF 80% 63V
2324	4822 122 30135	820pF 10% 100V
2325	4822 122 31237	82pF 2% 100V
2326	5322 121 42386	100nF 5% 63V
2327	5322 121 42386	100nF 5% 63V
2328	4822 124 40435	10µF 20% 50V
2331	4822 122 30027	1nF 10% 100V
2332	4822 125 50045	20pF TRIMMER
2335	4822 122 30027	1nF 10% 100V
2337	4822 122 30043	10nF 80% 100V
2338	4822 122 30027	1nF 10% 100V
2341	5322 121 42386	100nF 5% 63V
2342	5322 121 42386	100nF 5% 63V
2343	4822 124 40242	1µF 20% 63V
2344	4822 124 40433	47µF 20% 25V
2345	4822 122 31316	100pF 2% 100V
2346	4822 122 32151	56pF 2% 100V
2347	4822 122 30103	22nF 80% 63V

3316	4822 116 52406	2k 5% 0,5W
3320	4822 116 52391	1k 5% 0,5W
3322	4822 116 52391	1k 5% 0,5W
3324	4822 116 52429	620Ω 5% 0,5W
3335	4822 100 20149	2k2 POTENTIOMETER
3336	4822 116 52404	1k8 5% 0,5W
3337	4822 116 52421	390Ω 5% 0,5W
3338	4822 116 52429	620Ω 5% 0,5W
3343	4822 116 52406	2k 5% 0,5W
3344	4822 111 30508	10Ω 5% 0,33W
3345	4822 116 52416	330Ω 5% 0,5W
3347	4822 101 10651	470Ω POTENTIOMETER
3348	4822 116 52391	1k 5% 0,5W

5316	4822 156 10998	3µH
5325	4822 156 21125	3,9µH
5337	4822 156 21027	9,4µH
5338	4822 157 52278	12µH
5347	4822 157 53046	8µH

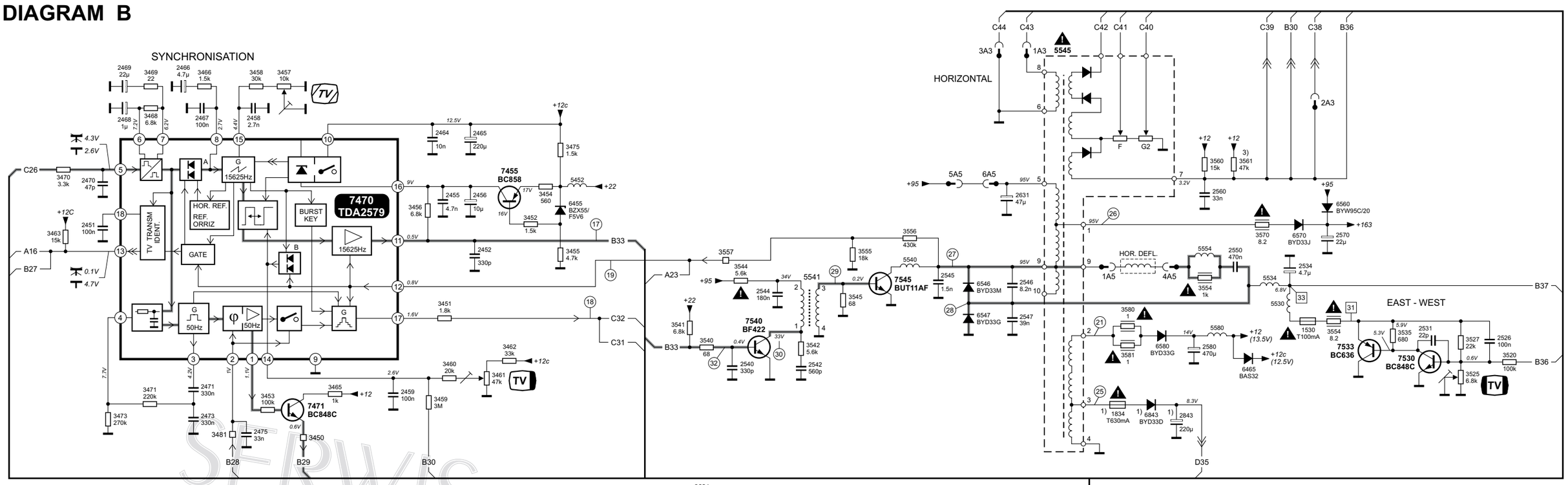
6327	4822 130 31983	BAT85

7310	4822 209 11389	TDA3592A/N5

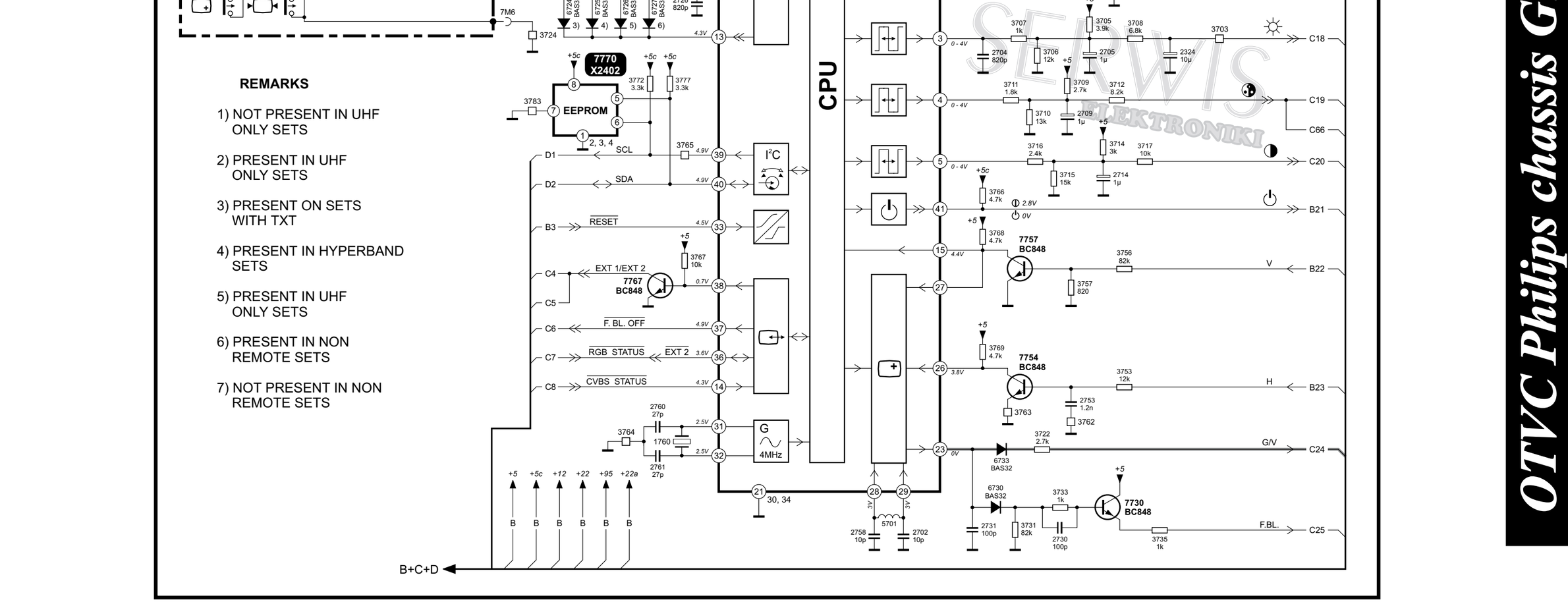
QUICK DIAGNOSIS SURVEY

Error message on the screen	Off time (ms) Flashing LED	Description of error component	Possible defective
F0	58	Internal RAM	IC7720
F2	174	Internal timer	IC7720
F4	290	EEPROM	IC7770
F7	464	Teletext decoder	IC7800 IC7820

DIAGRAM B



1) ONLY PRESENT ON SETS WITH TXT
2) NOT PRESENT IN NON REMOTE SETS
3) ONLY PRESENT IN 21" SETS

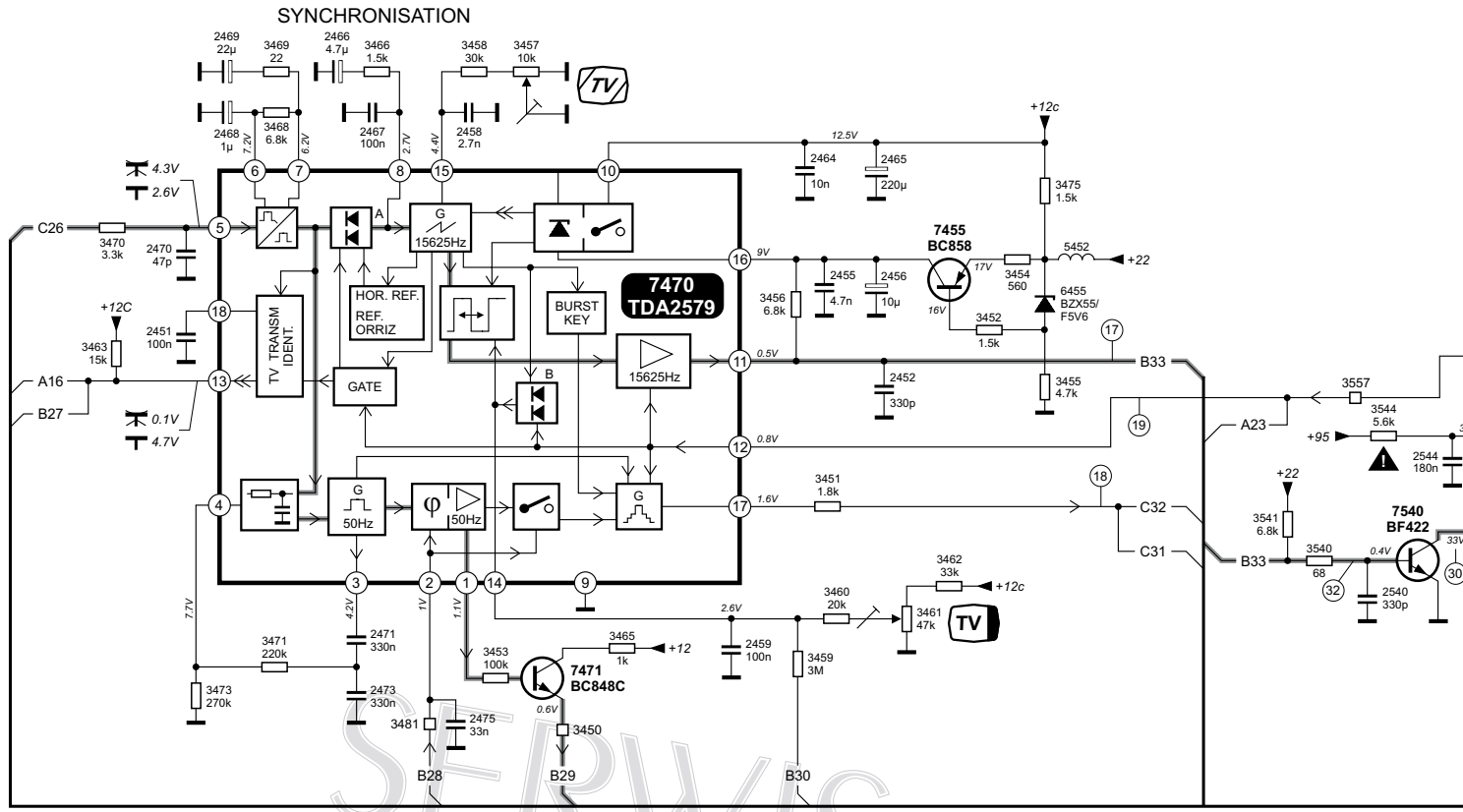


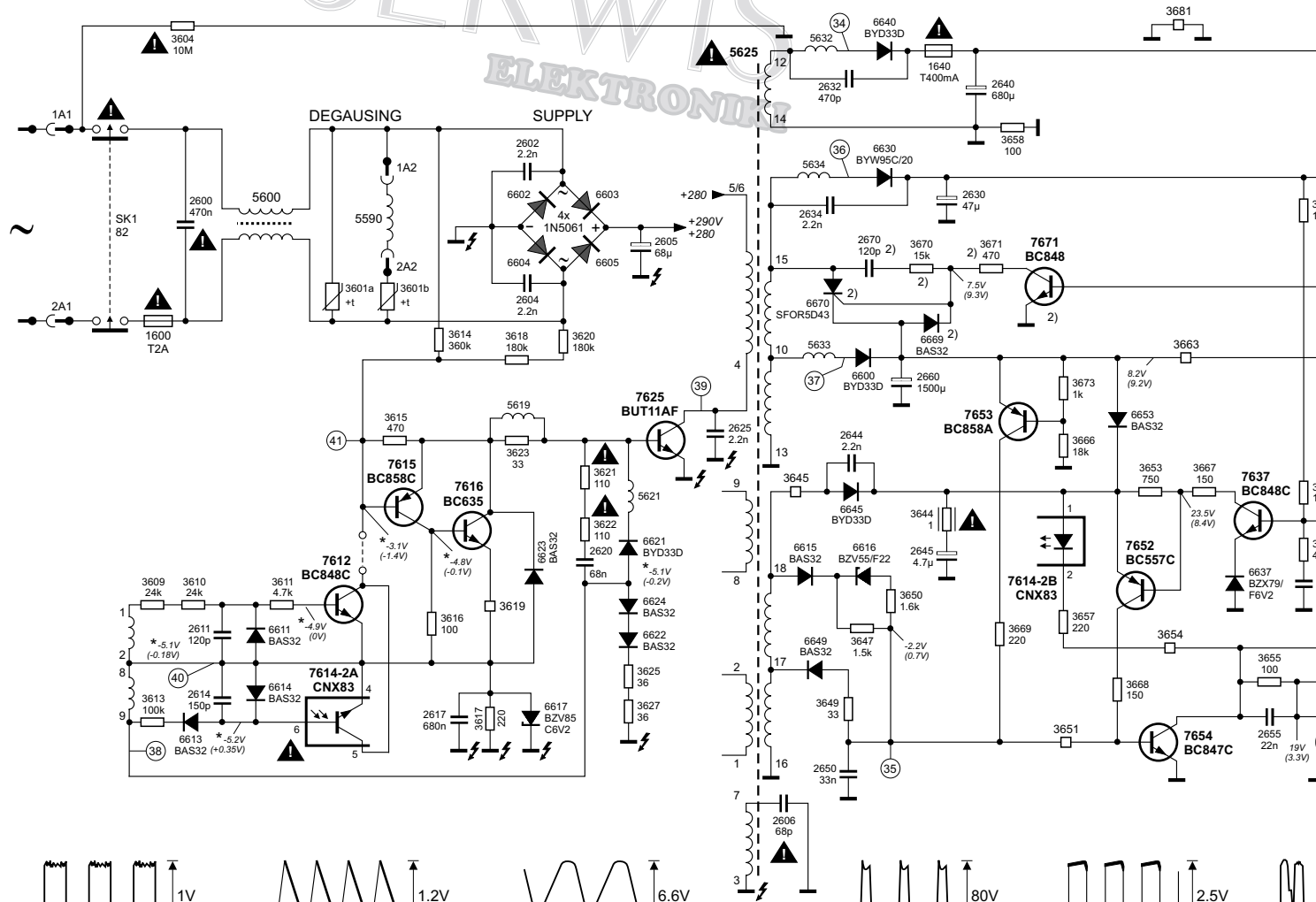
REMARKS

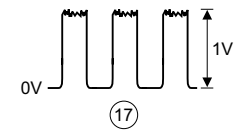
1) NOT PRESENT IN UHF ONLY SETS
2) PRESENT IN UHF ONLY SETS
3) PRESENT ON SETS WITH TXT
4) PRESENT IN HYPERBAND SETS
5) PRESENT IN UHF ONLY SETS
6) PRESENT IN NON REMOTE SETS
7) NOT PRESENT IN NON REMOTE SETS

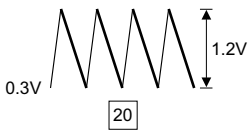
OTVC Philips chassis G90AE
(strona 1/3)

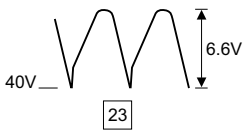
DIAGRAM B

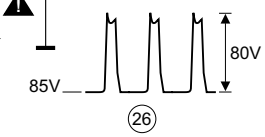

SYNCHRONISATION
7470
TDA2579
HOR. REF.
REF. ORRIZ
BURST KEY
TV TRANSM IDENT.
GATE
15625Hz
50Hz
7455
BC858
7471
BC848C
7540
BF422
+12c
+22
+12
+95
A16
B27
C26
A23
C31
C32
B33
B28
B29
B30
TV

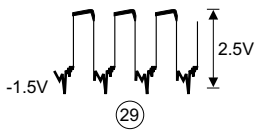

DEGAUSING
SUPPLY
SK1
82
5600
5590
1A2
2A2
1A1
2A1
1600
T2A
4x
1N5061
+280
+290V
+280
7625
BUT11AF
7615
BC858C
7616
BC635
7612
BC848C
7614-2A
CNX83
7614-2B
CNX83
7653
BC858A
7671
BC848
7652
BC557C
7637
BC848C
7654
BC847C
6640
BYD33D
6630
BYW95C/20
6600
BYD33D
6645
BYD33D
6615
BAS32
6616
BZV55/F22
6649
BAS32
6623
BAS32
6624
BAS32
6622
BAS32
6621
BYD33D
6617
BZV85
C6V2
6455
BZX55/
F5V6
6637
BZX79/
F6V2
6669
BAS32
6670
SFOR5D43
6653
BAS32
5625
1640
T400mA
7.5V
(9.3V)
8.2V
(9.2V)
23.5V
(8.4V)
-3.1V
(-1.4V)
-4.8V
(-0.1V)
-5.1V
(-0.2V)
-4.9V
(0V)
-5.1V
(-0.18V)
-5.2V
(+0.35V)
-2.2V
(0.7V)
19V
(3.3V)

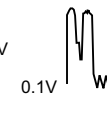

1V
0V
17

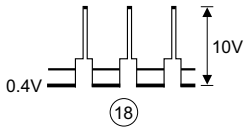

1.2V
0.3V
20

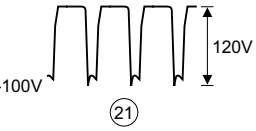

6.6V
40V
23

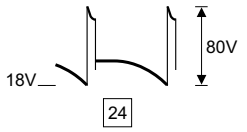

80V
85V
26

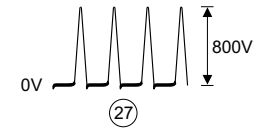

2.5V
-1.5V
29

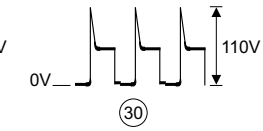

0.1V

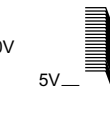

10V
0.4V
18

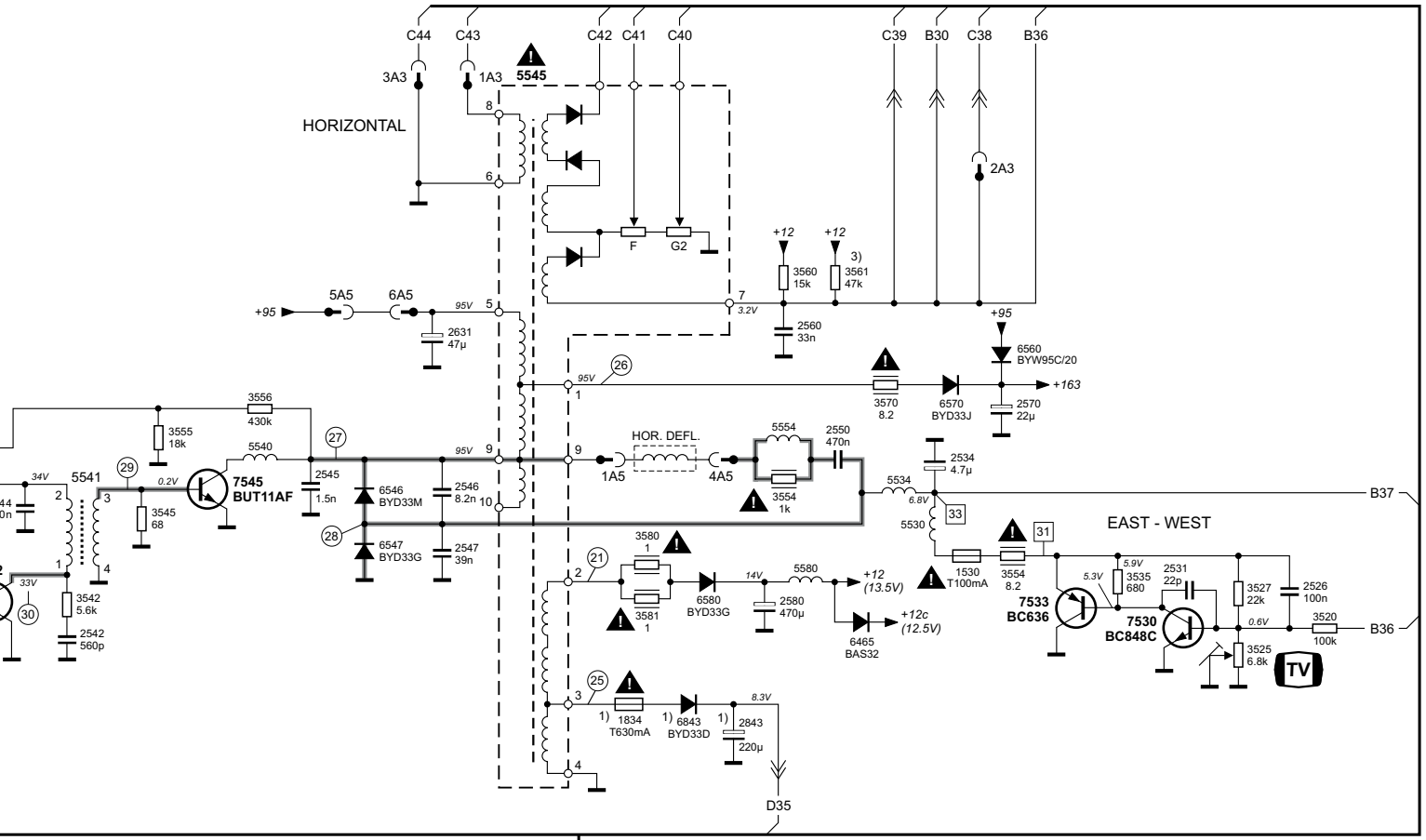

120V
-100V
21


80V
18V
24


800V
0V
27


110V
0V
30


5V



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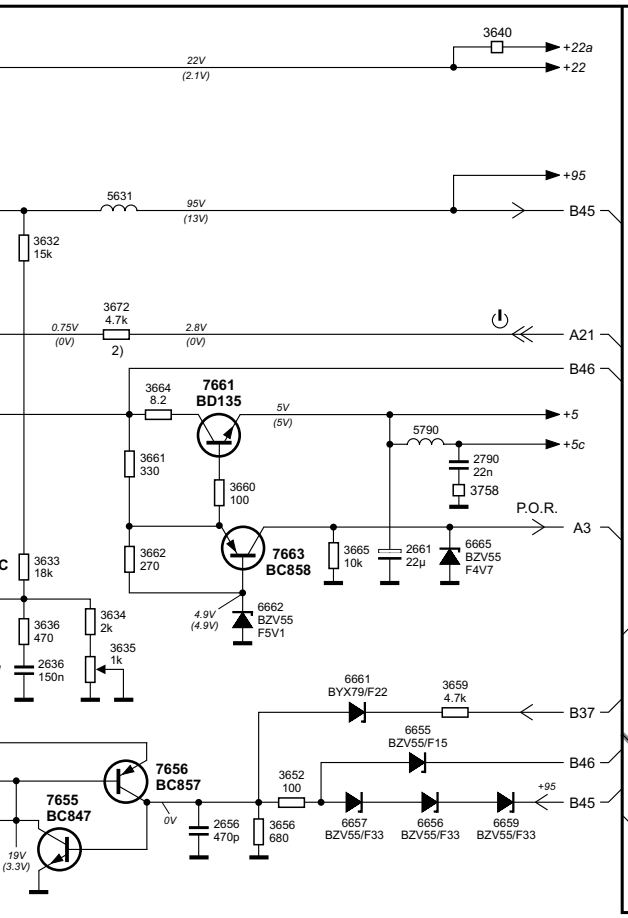
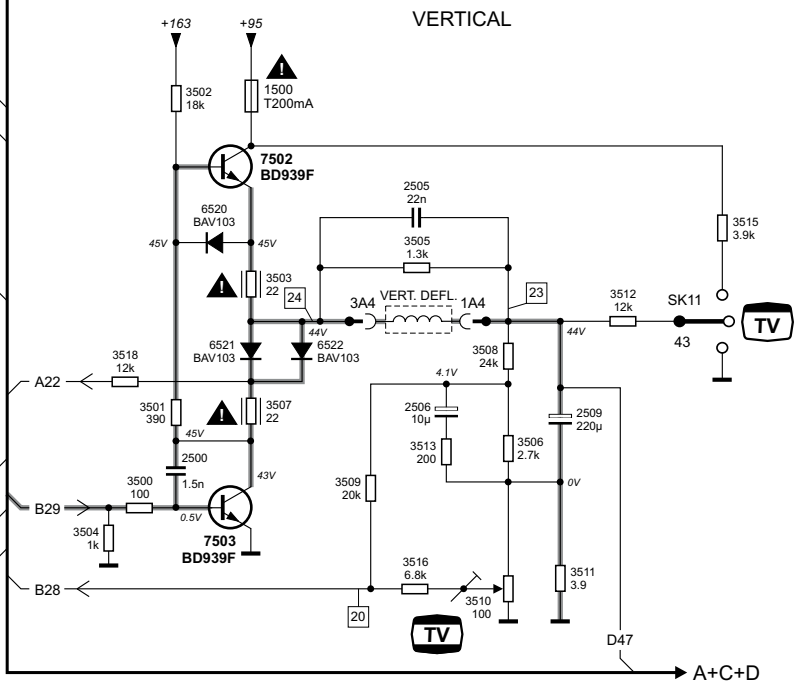
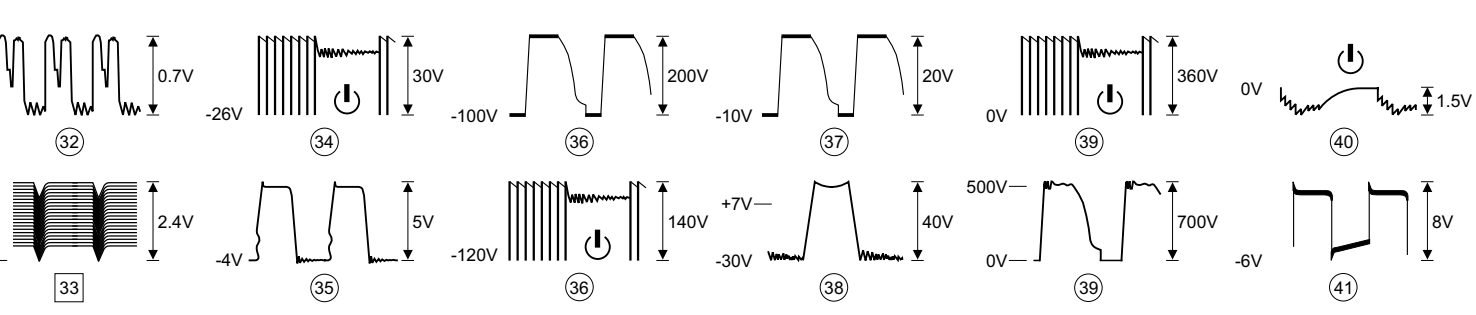
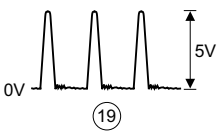
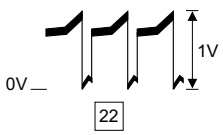
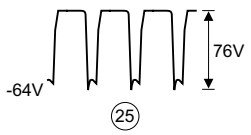


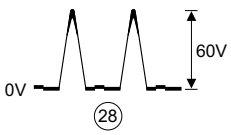


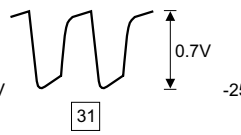












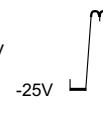
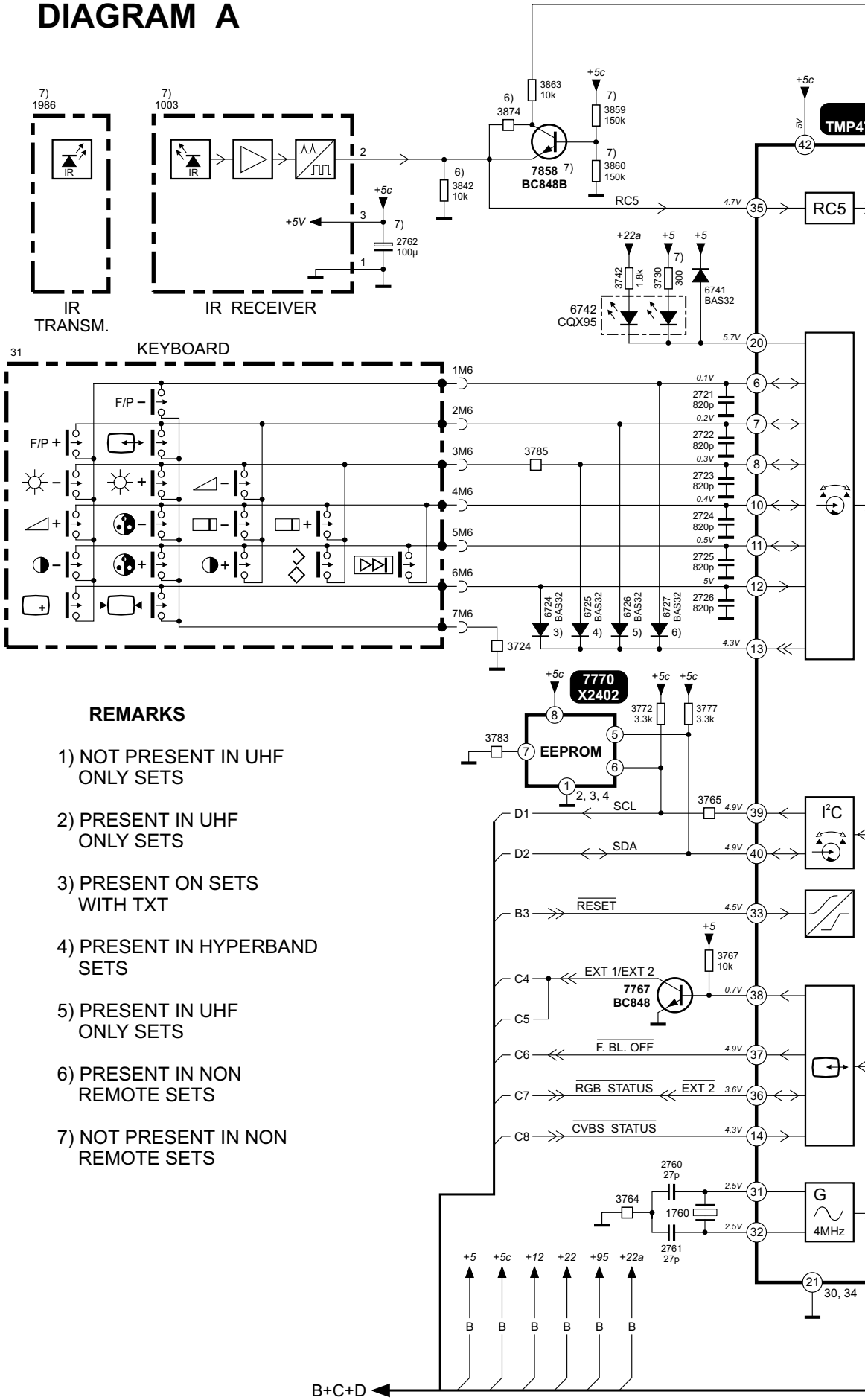


DIAGRAM A



REMARKS

1) NOT PRESENT IN UHF ONLY SETS

2) PRESENT IN UHF ONLY SETS

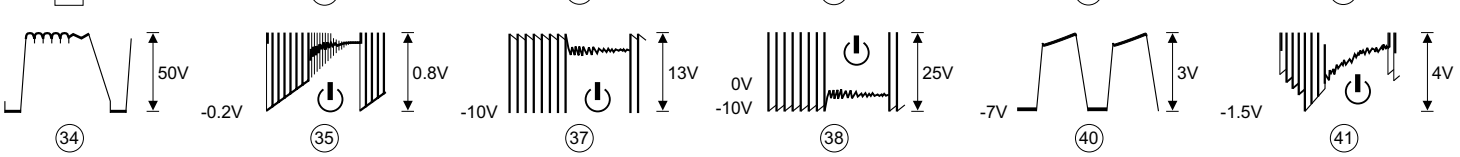
3) PRESENT ON SETS WITH TXT

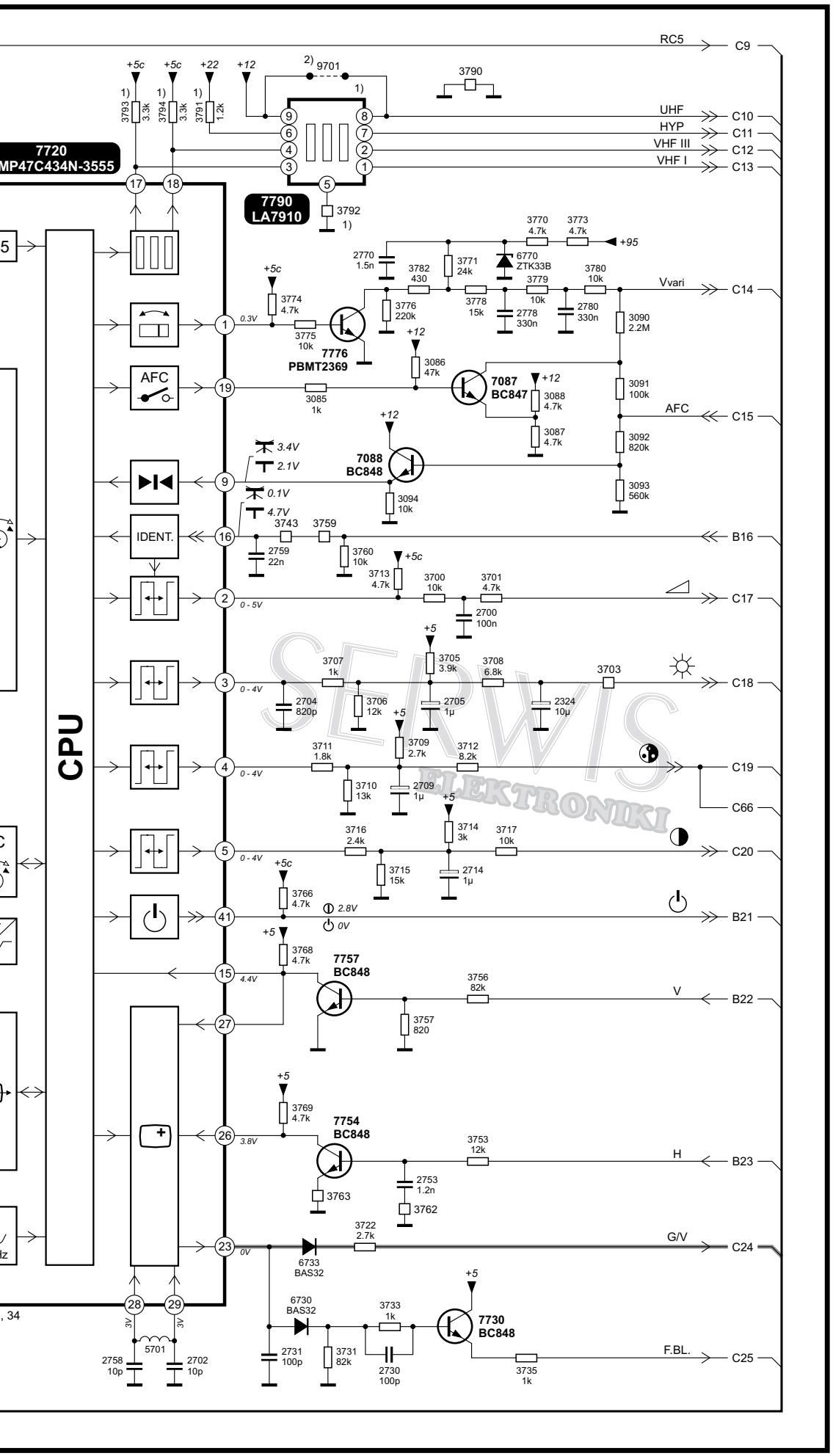
4) PRESENT IN HYPERBAND SETS

5) PRESENT IN UHF ONLY SETS

6) PRESENT IN NON REMOTE SETS

7) NOT PRESENT IN NON REMOTE SETS





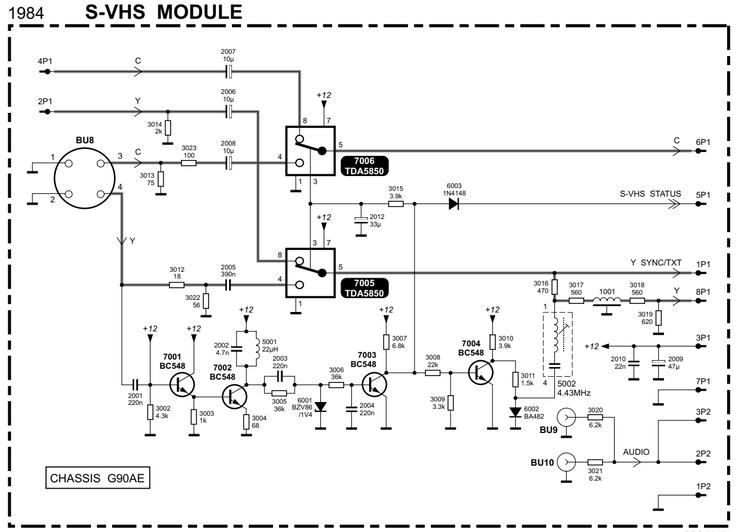
SERWIS ELEKTRONIKI

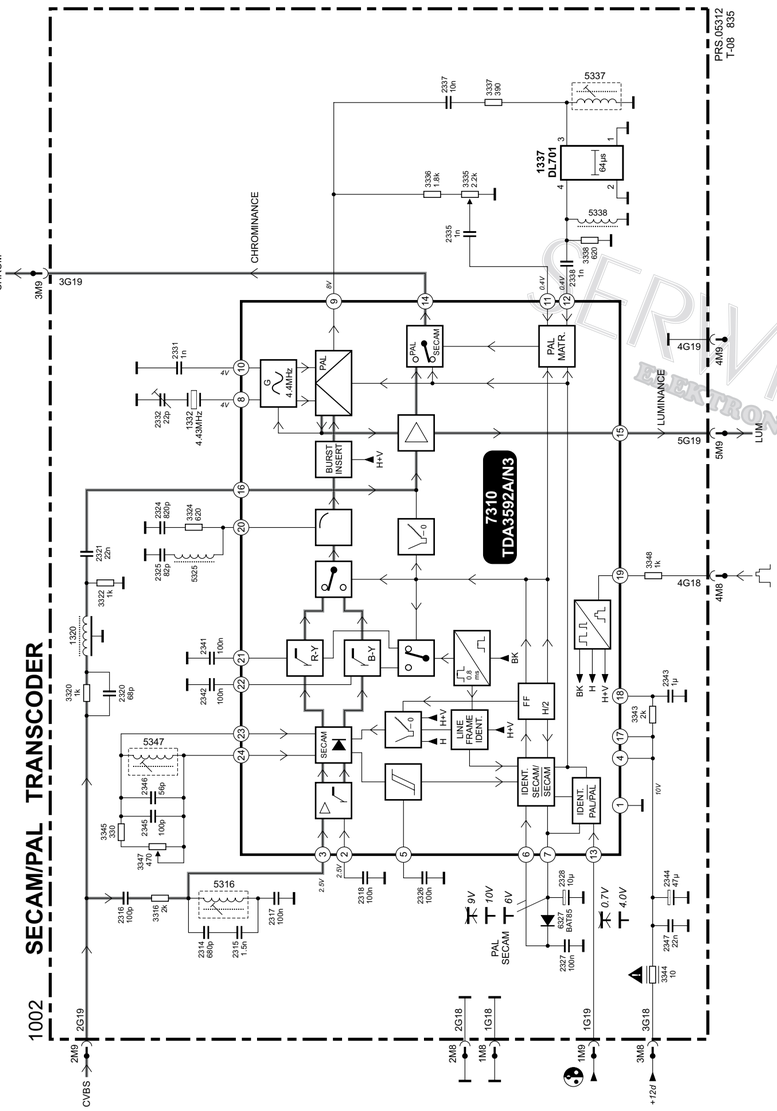
OTVC Philips chassis G90AE

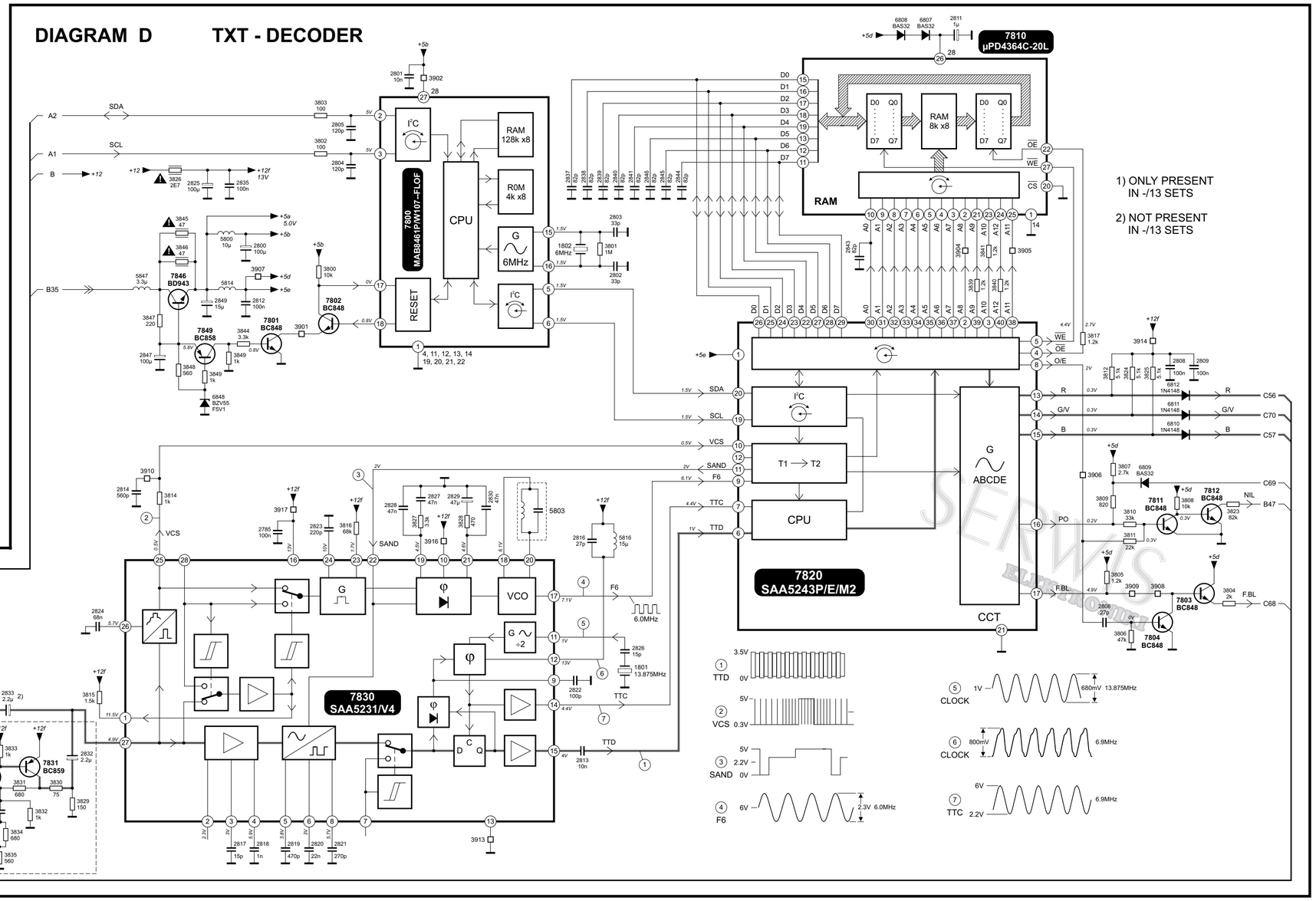
(strona 1/3)

OTVC Philips chassis G90AE
(strona 2/3)

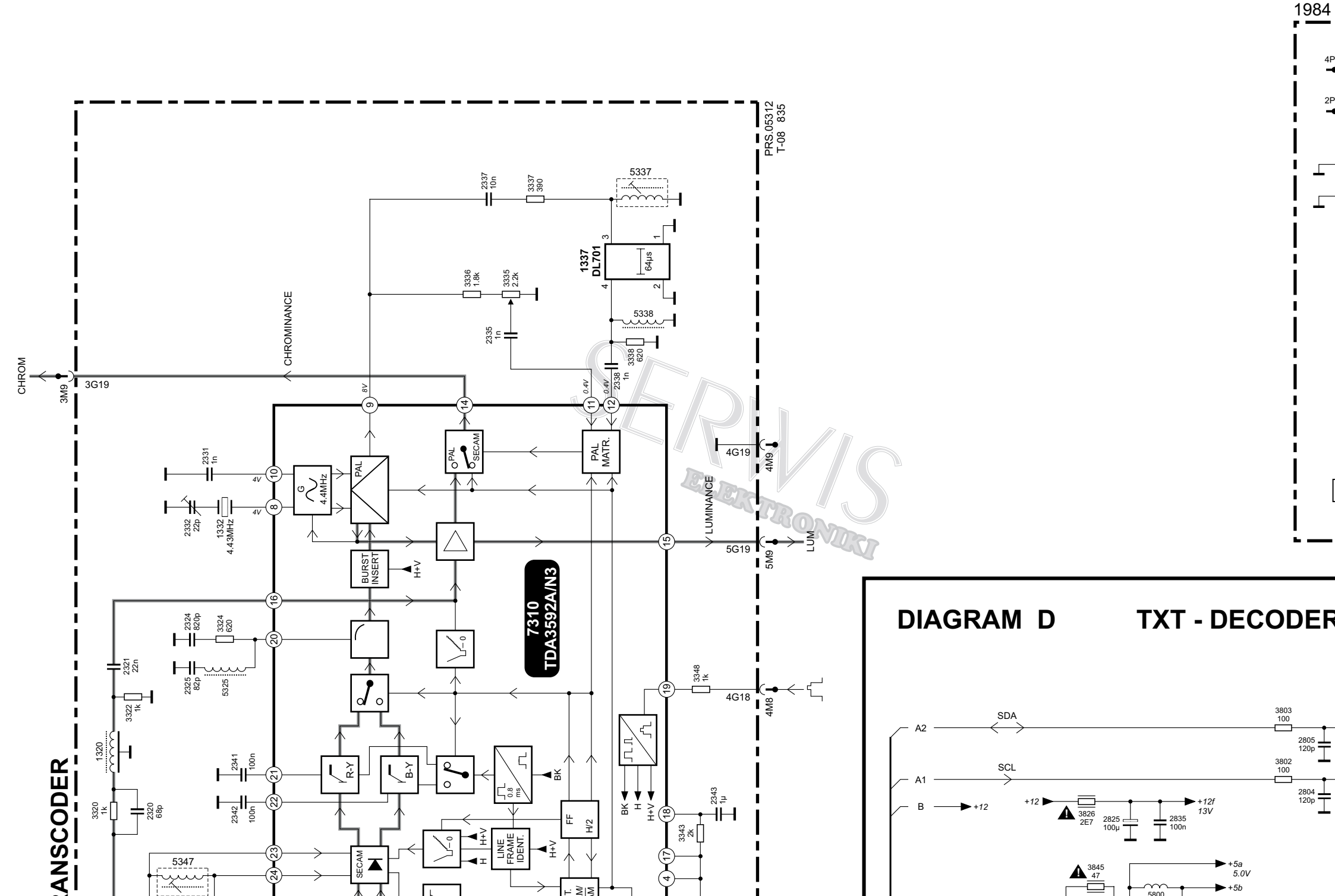
1984 **S-VHS MODULE**

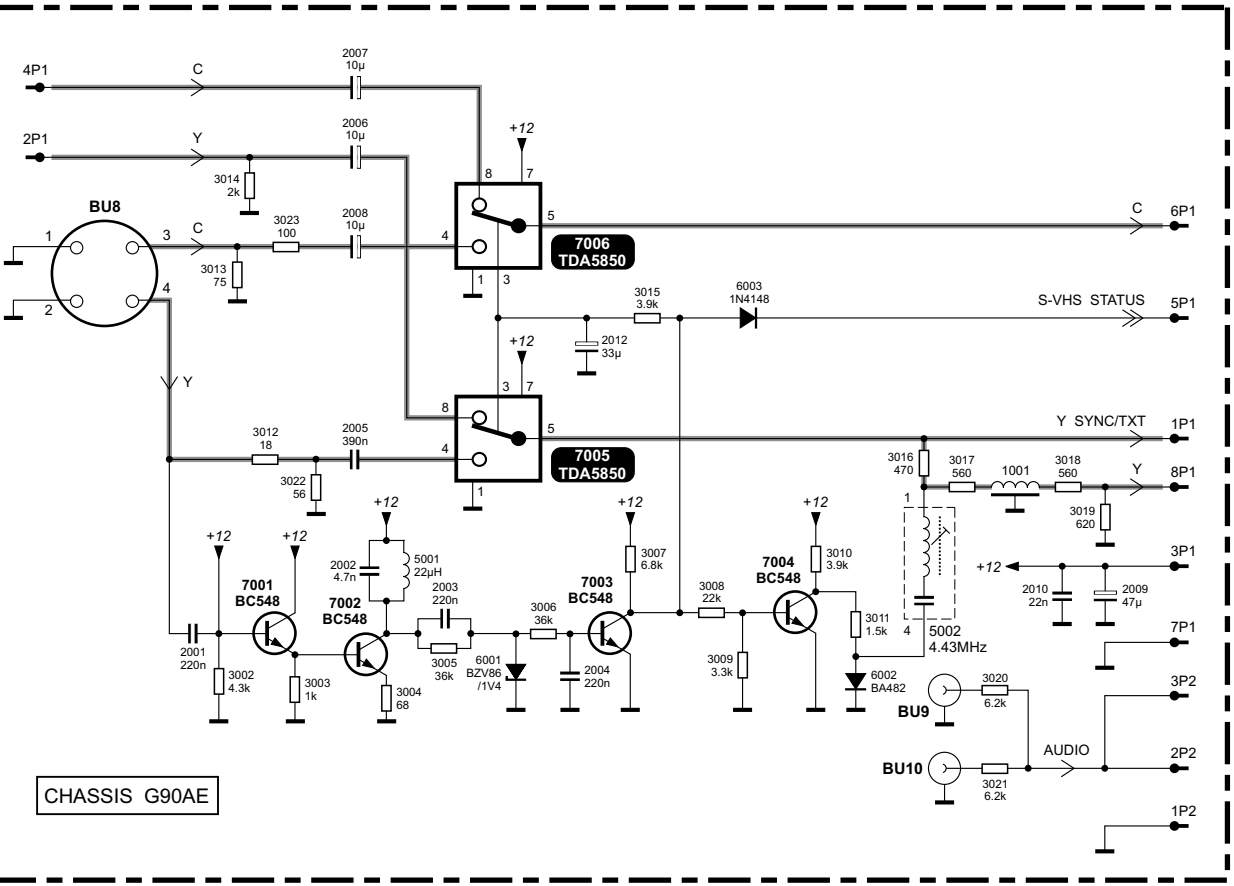






SERVIS ELEKTRONIKI

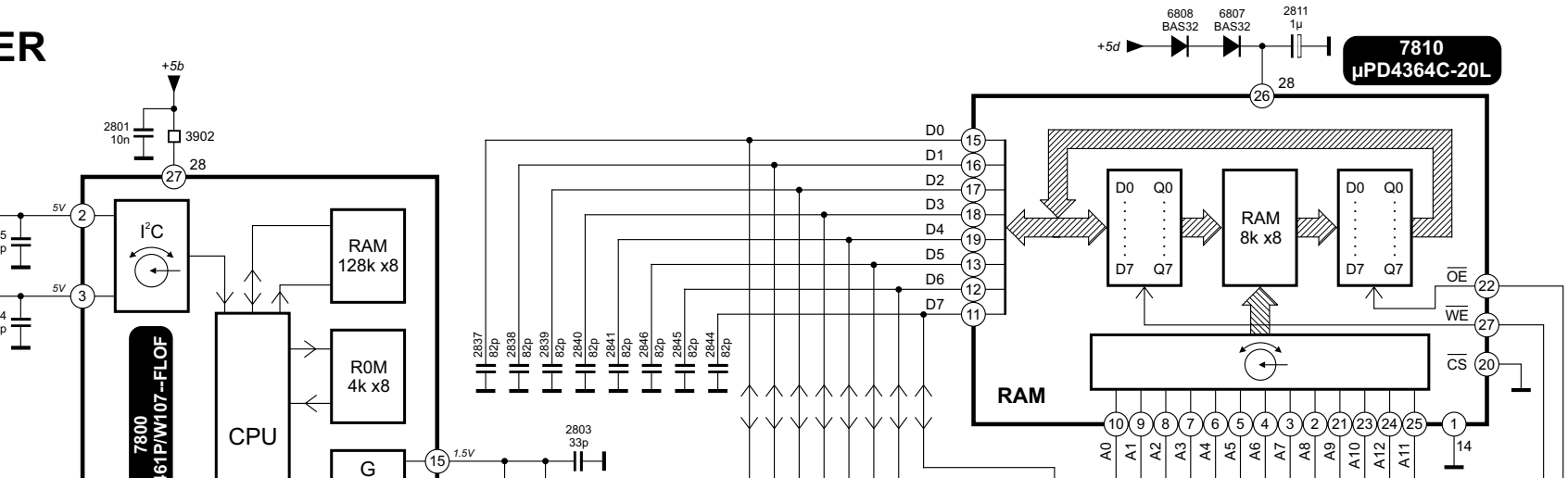

PRS.05312
T-08 835
1984
CHROMINANCE
CHROM
3M9
3G19
7310
TDA3592A/N3
PAL
SECAM
PAL MATR.
BURST INSERT
LUMINANCE
4G19
4M9
5G19
5M9
LUM
4G18
4M8
1337
DL701
64µs
5337
5338
5347
1320
1332
4.43MHz
4.4MHz
R-Y
B-Y
BK
H+V
H
FF
H/2
LINE FRAME IDENT.
SERVIS
ELEKTRONIKI
DIAGRAM D
TXT - DECODER
SDA
SCL
A2
A1
B
+12
+12f
13V
+5a
5.0V
+5b



PRS.06171
T02/942

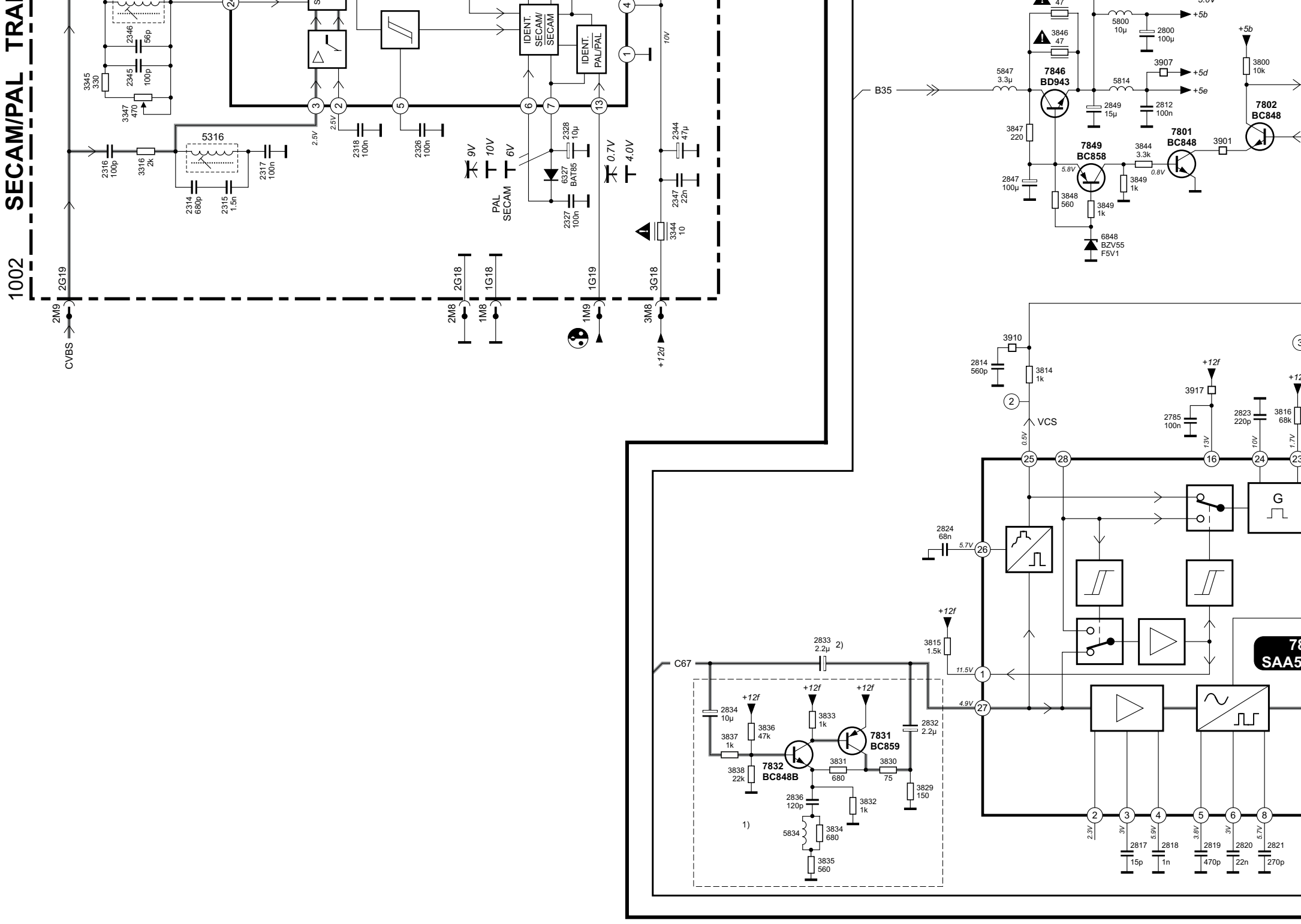
OTVC Philips chassis G90AE (strona 2/3)

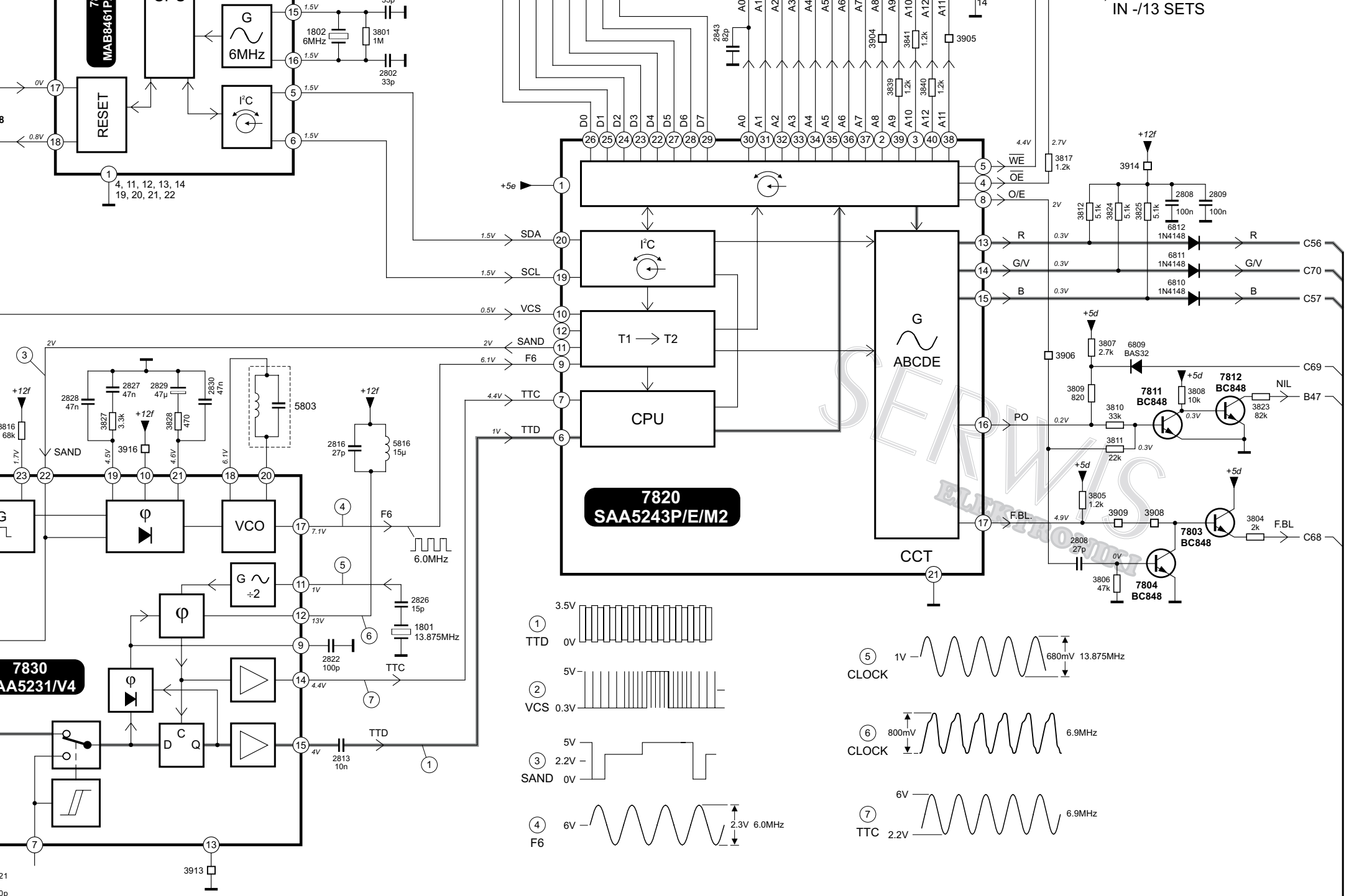
ER



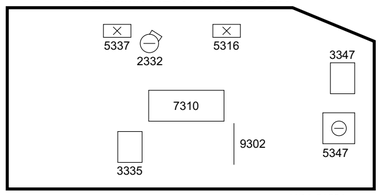
1) ONLY PRESENT IN -/13 SETS

2) NOT PRESENT IN -/13 SETS


1002 SECAM/PAL TRA
2G19
2M9
CVBS
2316 100p
3316 2k
5316
2314 680p
2315 1.5n
2317 100n
2346 56p
2345 100p
3345 330
3347 470
2318 100n
2326 100n
2328 10µ
6327 BAT85
2327 100n
2344 47µ
2347 22n
3344 10
IDENT. SECAM/ SECAM
IDENT. PAL/PAL
PAL SECAM
9V
10V
6V
0.7V
4.0V
2.5V
2G18
1G18
2M8
1M8
1G19
1M9
3G18
3M8
+12d
B35
5847 3.3µ
7846 BD943
5800 10µ
2800 100µ
3846 47
5814
2849 15µ
2812 100n
3907
+5b
+5d
+5e
3847 220
7849 BC858
7801 BC848
7802 BC848
3844 3.3k
3849 1k
3848 560
2847 100µ
3901
3800 10k
6848 BZV55 F5V1
5.8V
0.8V
3910
2814 560p
3814 1k
VCS
0.5V
3917
2785 100n
2823 220p
3816 68k
1.3V
1.0V
1.7V
2824 68n
5.7V
+12f
3815 1.5k
11.5V
4.9V
C67
2833 2.2µ
2)
2834 10µ
3836 47k
3837 1k
3838 22k
7832 BC848B
3833 1k
7831 BC859
2832 2.2µ
3831 680
3830 75
3829 150
2836 120p
3832 1k
3834 680
5834
3835 560
1)
2.3V
3V
5.9V
3.8V
5.7V
2817 15p
2818 1n
2819 470p
2820 22n
2821 270p
G
78
SAA5

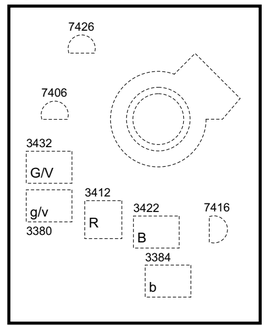

IN -/13 SETS
MAB8461P
RESET
I²C
G
6MHz
1802
6MHz
3801
1M
2802
33p
4, 11, 12, 13, 14
19, 20, 21, 22
D0 D1 D2 D3 D4 D5 D6 D7
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A12 A11
2843
82p
3904
3841
1.2k
3905
3839
1.2k
3840
1.2k
+5e
SDA
SCL
VCS
SAND
F6
TTC
TTD
I²C
T1 → T2
CPU
7820
SAA5243P/E/M2
G
ABCDE
CCT
WE
OE
O/E
R
G/V
B
PO
F.BL.
3817
1.2k
+12f
3914
2808
100n
2809
100n
3812
5.1k
3824
5.1k
3825
5.1k
6812
1N4148
6811
1N4148
6810
1N4148
C56
C70
C57
+5d
3807
2.7k
6809
BAS32
3906
C69
3809
820
7811
BC848
3808
10k
7812
BC848
NIL
B47
3810
33k
3823
82k
3811
22k
3805
1.2k
3909
3908
7803
BC848
3804
2k
C68
2808
27p
3806
47k
7804
BC848
SAND
3916
2828
47n
2827
47n
2829
47µ
2830
47n
3827
3.3k
3828
470
5803
2816
27p
5816
15µ
3816
68k
φ
VCO
F6
6.0MHz
G
÷2
2826
15p
1801
13.875MHz
2822
100p
TTC
TTD
2813
10n
3913
7830
AA5231/V4
1 TTD 3.5V 0V
2 VCS 5V 0.3V
3 SAND 5V 2.2V 0V
4 F6 6V 2.3V 6.0MHz
5 CLOCK 1V 680mV 13.875MHz
6 CLOCK 800mV 6.9MHz
7 TTC 6V 2.2V 6.9MHz

SECAM/PAL TRANSCODER

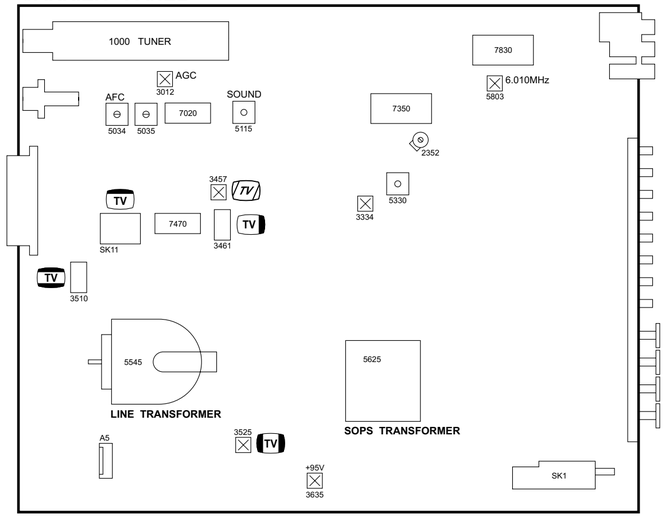


MDA.01684
T07-848
CHASSIS G90AE

CRT PANEL



CARRIER PANEL



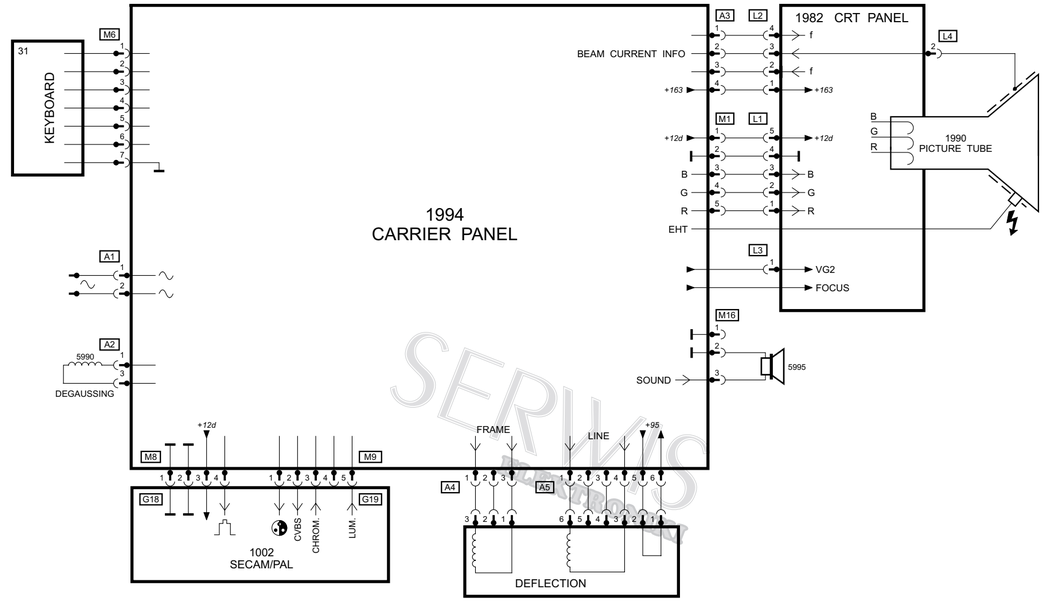
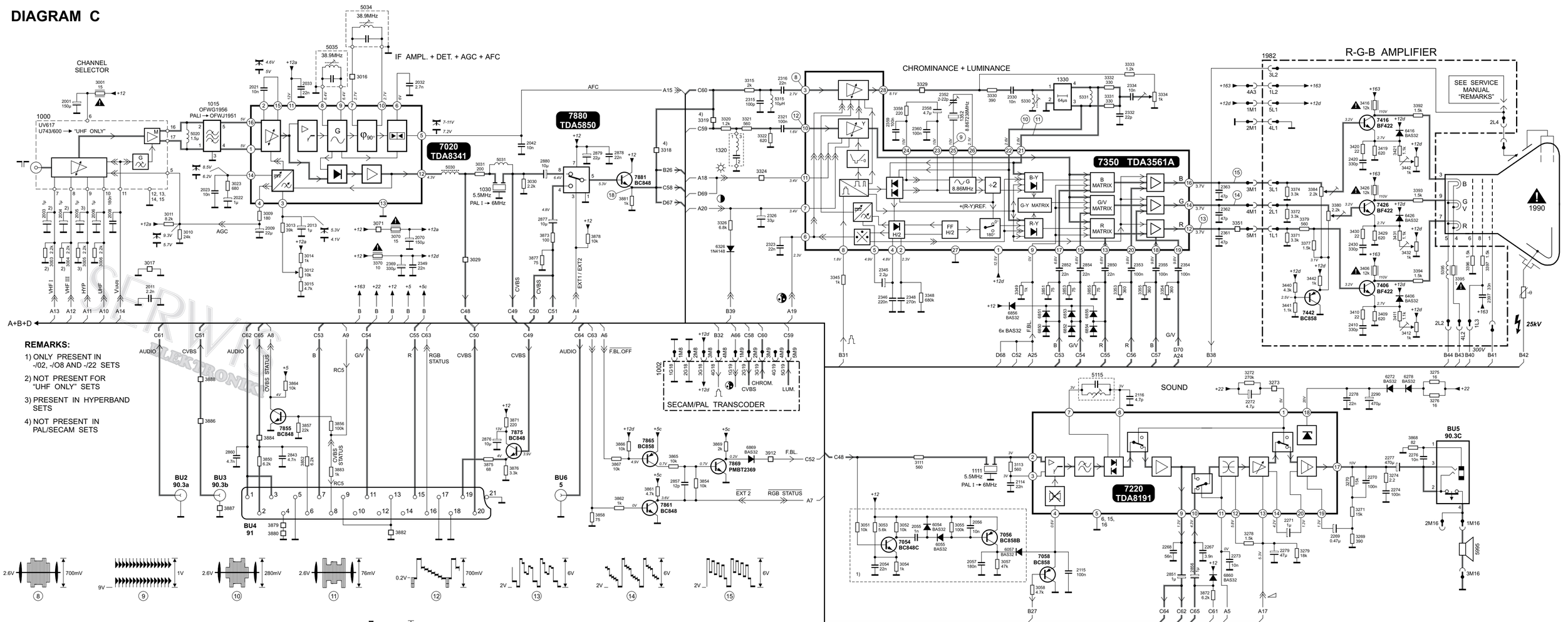
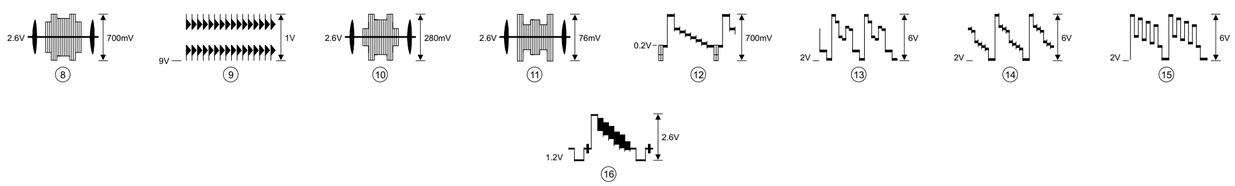


DIAGRAM C



REMARKS:

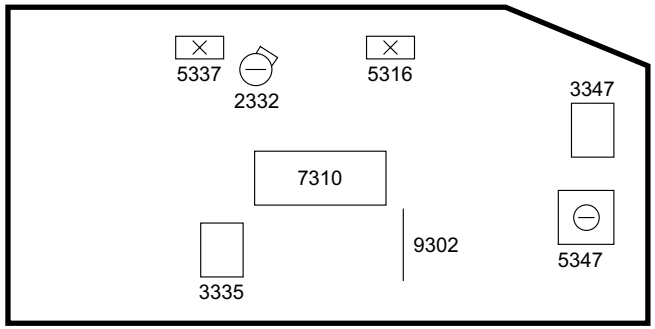
1) ONLY PRESENT IN -/02, -/O8 AND -/22 SETS
2) NOT PRESENT FOR "UHF ONLY" SETS
3) PRESENT IN HYPERBAND SETS
4) NOT PRESENT IN PAL/SECAM SETS



OTVC Philips chassis G90AE

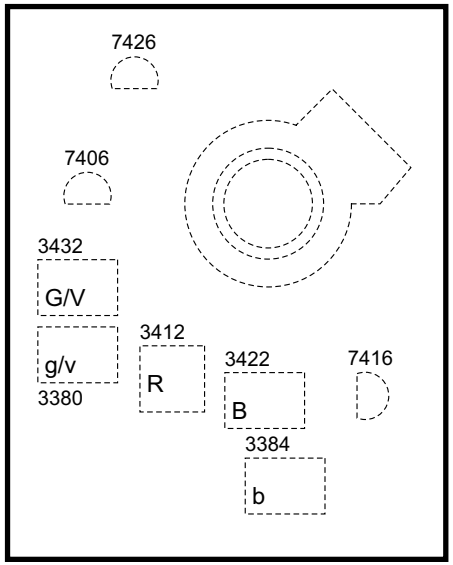
(strona 3/3)

SECAM/PAL TRANSCODER



MDA.01684
T07-848
CHASSIS G90AE

CRT PANEL



CARRIER PANEL

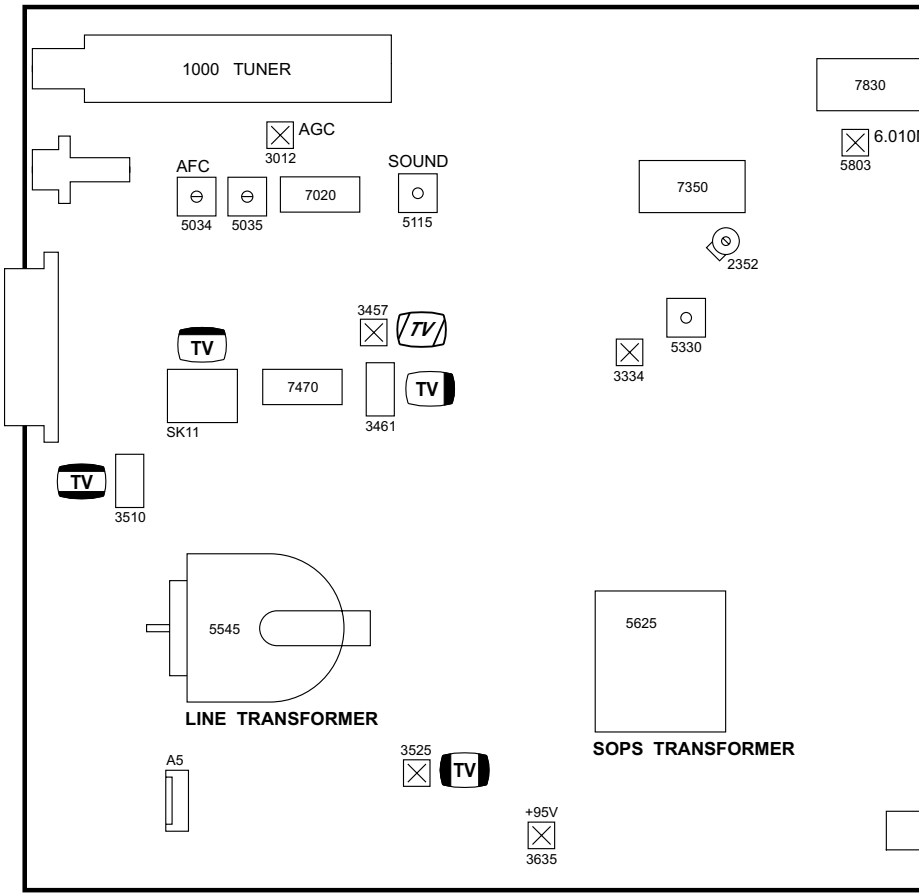
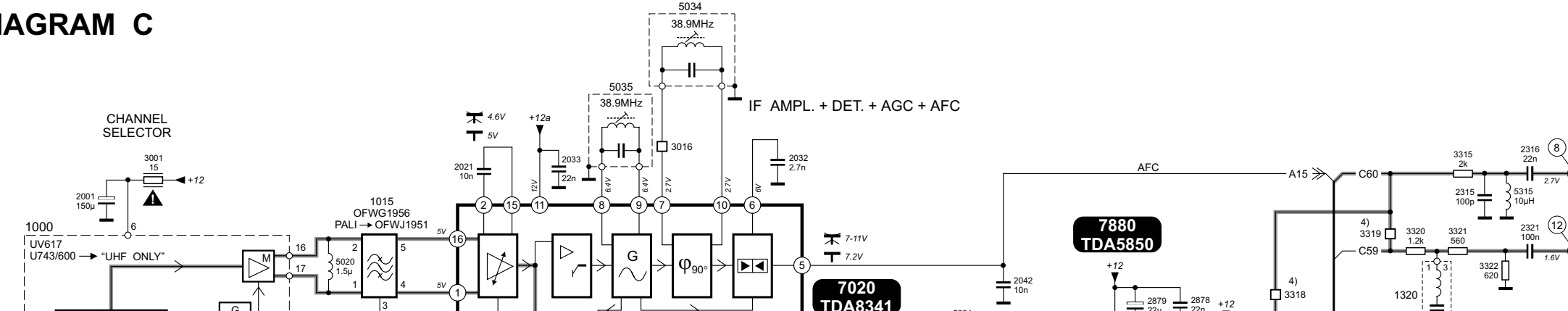
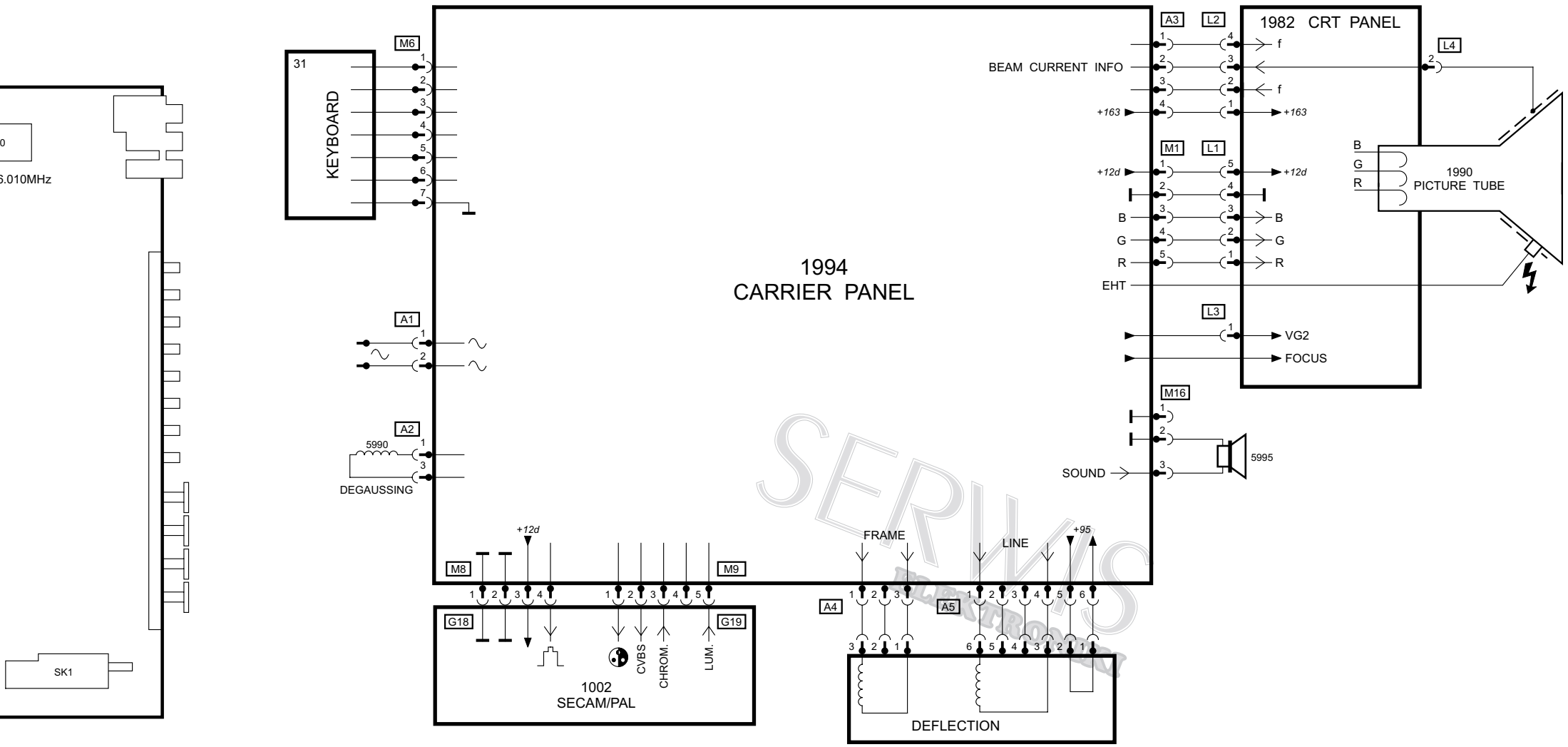
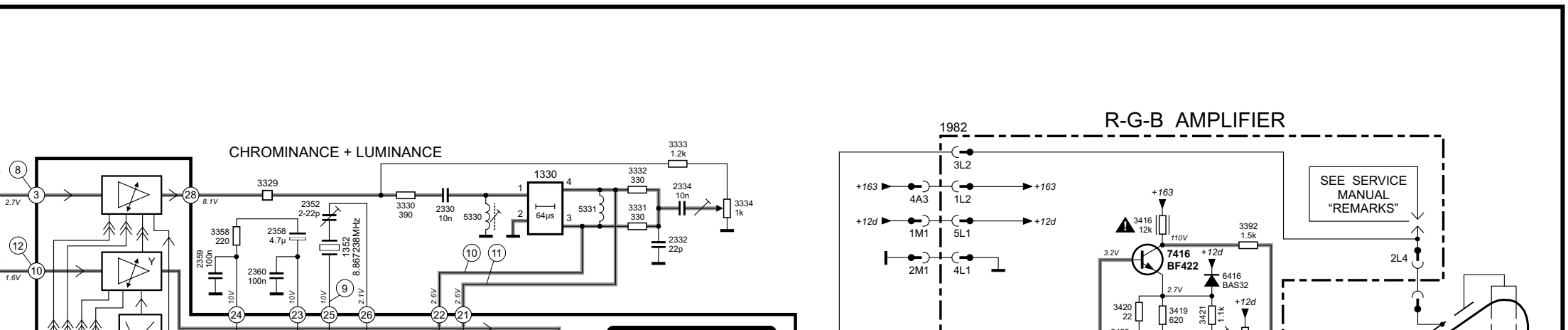
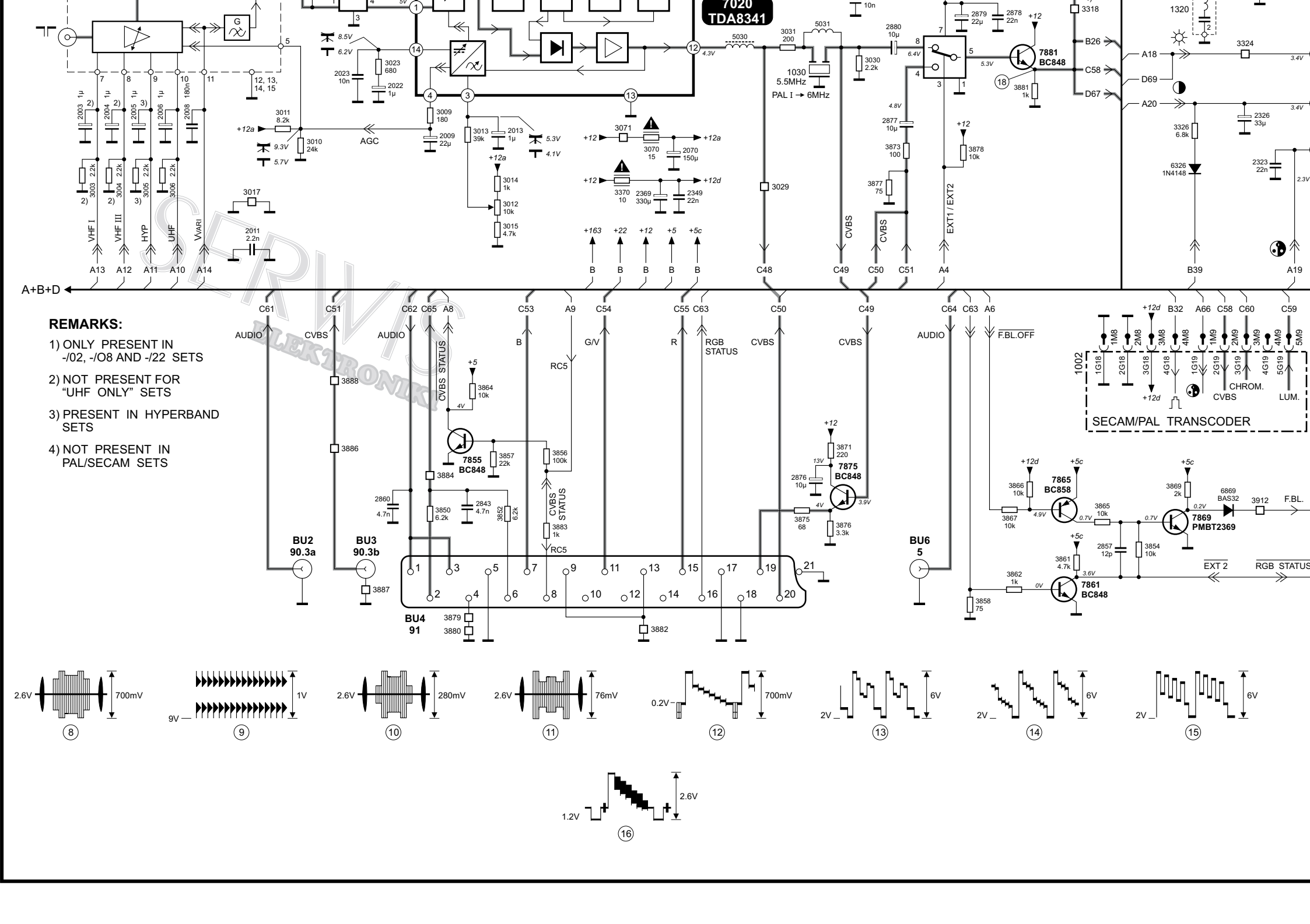


DIAGRAM C




KEYBOARD
31
M6
1994
CARRIER PANEL
1982 CRT PANEL
BEAM CURRENT INFO
+163
+12d
B
G
R
EHT
VG2
FOCUS
SOUND
5995
1990
PICTURE TUBE
A1
A2
5990
DEGAUSSING
M8
M9
G18
G19
CVBS
CHROM.
LUM.
1002
SECAM/PAL
FRAME
LINE
+95
A4
A5
DEFLECTION
SK1
6.010MHz


CHROMINANCE + LUMINANCE
R-G-B AMPLIFIER
1982
SEE SERVICE MANUAL "REMARKS"
7416
BF422
6416
BAS32
+12d
+163
2L4
3L2
4A3
1L2
1M1
5L1
2M1
4L1



REMARKS:

1) ONLY PRESENT IN -/02, -/O8 AND -/22 SETS
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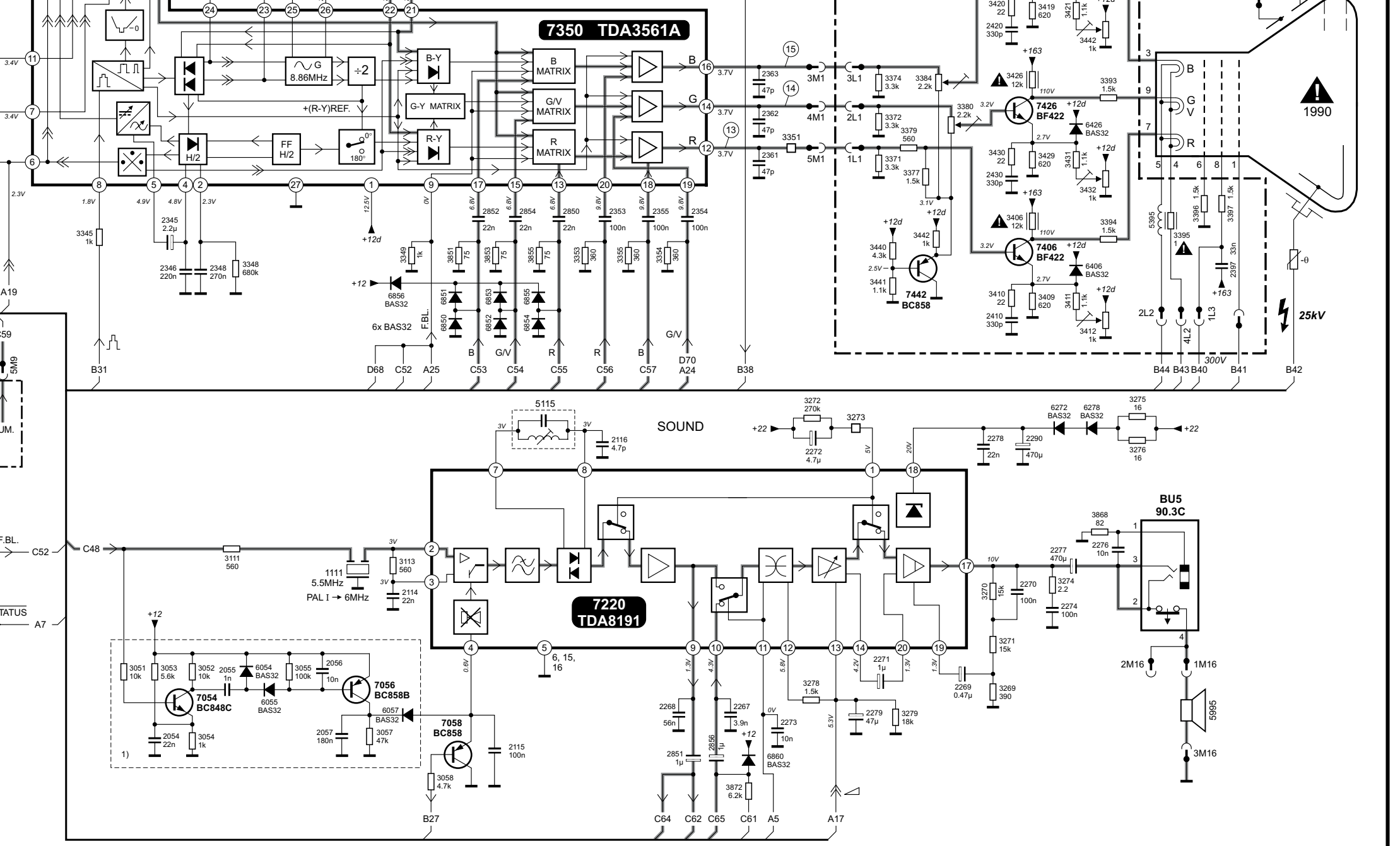
3) PRESENT IN HYPERBAND SETS
4) NOT PRESENT IN PAL/SECAM SETS



OTVC Philips chassis G90AE

(strona 3/3)

CHASSIS G90AE